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CITY OF CAMBRIDGE.

THE

MAYOR'S ADDRESS

AT THE

ORGANIZATION OF THE CITY GOVERNMENT,

JANUARY 7, 1889,

AND

THE ANNUAL REPORTS

MADE TO THE CITY COUNCIL,

FOR THE YEAR 1888.

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MAYOR'S ADDRESS.

Gentlemen of the City Council:—

Custom requires, and a due regard to the wishes of our citizens demands that an incoming administration shall present a substantially exact and reasonably comprehensive statement of the financial condition of our city,—its present and its prospective needs in the near future, together with such recommendations as may appear to be wise and worthy of your careful consideration.

The 44th year of its municipal existence finds our good city of Cambridge enjoying an unprecedented degree of progress and prosperity. The wisdom of our predecessors in the councils of the city in planning and building for the future is now bearing fruit. I trust we all may bring to the discharge of the duties of our respective positions that intelligent zeal and devotion to our trusts which has distinguished the long line of public servants whom we succeed.

To our retiring chief magistrate, in behalf of the people of Cambridge, I feel that I am justified in saying: Your faithful, brilliant and successful administration of affairs, covering a period of four years, is recognized and approved by a constituency which, whilst critical in its analysis, is always generous in its awards to those who serve by methods direct and true.

We believe you may also have written as did John Adams at the age of twenty, "The study and practice of law, I am sure, does not dissolve the obligations of morality or of religion." And again, "Let little objects be neglected and forgot, and great ones engross, arouse and exalt my soul."

The intimate association you have had with the great public improvements being now prosecuted toward completion, ineffaceably connects your name with them for all time. In this, and the consciousness of having performed true and honorable service for the city of your birth, you will have a well-deserved reward.

Gentlemen, your attention is called to the financial statement as submitted by the City Treasurer and Auditor, upon whom I rely for the figures presented, as follows:—

Total receipts for the year			$2,356,914 17
Amount in Treasury December 1st, 1887			125,068 68
			$2,481,982 85
Total expenditures for the year			2,335,878 83
Balance in Treasury November 30th, 1888			$146,104 02
From which deduct bal. unexpended from sale of bonds:—			
Bridge Loan	$61,770 62		
Sewer Loan	106 35		
Fresh Pond Land Loan	1,268 78		
Stony Brook Loan	15,403 23		
		$78,548 98	
And balance unexpended on account of contracts begun and not completed:—			
Peabody School House	17,196 26		
Extension of Charles River Street	1,000 00		
Extension of De Wolfe Street	1,600 00		
Widening of Inman Street	1,450 00		
Sea Wall on Charles River at Mill Pond	1,073 40		
		$22,319 66	
			$100,868 64
Leaving a net balance of			$45,235 38

There has been an addition to the City Funded Debt during the year of $283,000, caused by the issue of coupon bonds, as follows:

Bridge, Loan dated July 2d, 1888, payable in thirty years at an annual interest of four per cent, Harvard Bridge	$100,000 00
Bridge, Loan dated September 1st, 1888, payable in thirty years at an annual interest of four per cent, Harvard Bridge	50,000 00
Bridge, Loan dated September 1st, 1888, payable in thirty years at an annual interest of four per cent, Widening, Extension and Laying out Front Street as an Avenue to Harvard Bridge	50,000 00
Land, Loan dated August 1st, 1888, payable in ten years at an annual interest of four per cent, Lot of Land for the new City Hall	83,000 00
	$283,000 00

Of the Water Debt of the City there have matured during the year bonds amounting to . . .	$175,000 00
There has been an addition to the Water Debt of the City during the year of $73,000, caused by the issue of coupon and registered bonds payable in twenty years, at an annual interest of four per cent, Stony Brook Additional Water Supply	73,000 00

THE CITY DEBT.

		1887.	**1888.**
Funded City Loan		$1,616,000 00	$1,899,000 00
Contingent Loan, being a City Note to the Trustees of Sinking Fund of Water Works		200,000 00	200,000 00
Trust Funds:—			
Dowse Institute Fund . .	$10,000 00		
Sanders Temperance Fund	10,000 00		
Daniel White Charity . .	5,000 00		
Fay Fund, paid in 1888 . ,	1,000 00		25,000 00
		26,000 00	
Gross City Debt		$1,842,000 00	$2,124,000 00
Less amount in City Sinking Fund .		428,564 59	499,968 28
Net City Debt		$1,413,435 41	$1,624,031 72
The increase of the net city debt from last year			$210,596 31
		$1,413,435 41	$1,413,435 41

THE WATER WORKS DEBT.

Funded Water Loan	$1,825,500 00	$1,723,500 00
Less Water Sinking Fund	838,597 01	753,942 00
Amount carried forward	$986,902 99	$969,558 00

Amount brought forward	$986,902 99	$969,558 00
The decrease of the net water debt from last year		17,344 99
	$986,902 99	$986,902 99

THE PUBLIC SCHOOL SYSTEM.

The same spirit that makes the patriot leave his father, mother, wife and child, and consecrate even his life to the service of an imperilled country, also makes him true to our Public School System. It is the foundation stone of our liberties, and is to be cherished and maintained against all encroachments, and against all odds.

PUBLIC SCHOOLS.

Fortunate indeed is Cambridge in having the voluntary service of eminent and learned men and women to manage and control our system of Public Schools, the most important branch of our municipal work. They are aided in the practical workings of the system by the Superintendent, distinguished for duty conscientiously performed, and a corps of teachers, probably, as a whole, unexcelled in this country.

To mould and exalt the mind, to cultivate the physical, and develop the moral capacities of the boys and girls of today, that they, tomorrow, may become the good citizens and men of affairs, or the queens of Christian homes, is an avocation calculated to inspire the teacher, not only with the sense of his or her great responsibility, but with enthusiastic diligence.

It is not given to all persons to impart knowledge in the true sense, but it is possible, and desirable, and commendable, with kindness, to aid and assist, with generous non-partiality, not alone the pupil who is polite, apt, attentive and eager to learn, but as well, if not with more effort, strive to win the confidence and challenge the respect and the fond regard of those of retiring disposition, the super-sensitive, dull and possibly unattractive scholar. It must not be forgotten that some of the greatest statesmen this country has ever produced were of the latter class.

A kind word at the right moment, a helping hand extended at a hard place, evidences of interest and sympathy with the plodding and lagging student, may develop, in time, one who shall stand a peer among the best.

The gentlemen and ladies in charge of our Public schools are not taskmasters, setting stints to our children as of yore, terrorizing them with frowns, and brutalizing them with blows, but *teachers* believing in the power of love and kindly treatment over the stubborn and obdurate, and in the ennobling influences of methods controlled by these sentiments. God bless the children.

I am indebted to Francis Cogswell, Superintendent of Schools, for

SCHOOL STATISTICS FOR 1888.

Number of pupils the first of December	10,462
Number of Teachers	241
Cost of the day schools, not including expenditures for new school houses	$225,408 57
Increase over last year	2,729 38
Cost of the schools per pupil	23 10
Less than last year per pupil	0 51

SUPERINTENDENT'S REMARKS.

The English High School Building, the plans for which are nearly completed, should be begun early in the spring.

A new school house is needed in Ward IV.

The original plan for the enlargement of the Putnam School House in Ward III should be carried out.

PUBLIC LIBRARY.

Your attention is respectfully called to the report of the Trustees of the Cambridge Public Library, and the valuable statistical information communicated through that board by the accomplished Librarian. It will be perceived that the Library is performing a silent but noble work, and that its facilities for diffusing knowledge are availed of more largely each succeeding year. This trust is worthy of generous support, and the happy effects upon the public, so largely a reading people,—when fairly set in order within the spacious, elegant and convenient new Public Library Building, cannot well be overestimated.

The new building will probably be ready for occupancy early in the summer. Several weeks' time will be required in which to remove, re-cover and arrange the 20,000 volumes contained in our library, and the vacation season would appear to be the best for doing the work necessarily required for the removal.

The Trustees ask for an increased appropriation this year with which to meet the prospective extraordinary expenses incident to the change to the new building.

A larger sum will be required annually for the purchase of books than has heretofore been set aside for this purpose. For several years the amount available, after payment of current running expenses, has been barely 3 1-2 cents per capita of our population.

STREET DEPARTMENT.

The operations of this department are performed under the public eye, and as not only the whole of our own population, but many of the people living contiguous in Middlesex, Norfolk and Suffolk Counties use our highways both for purposes of business and pleasure, it should be the aim and ambition of the Superintendent of Streets, as it undoubtedly is, acting with the advice and assistance of the Joint Committee on Roads and Bridges, aided also by the Standing Committee of the Board of Aldermen, to avail of the most approved methods, materials and appliances in order to secure street surfaces alike firm, even, well drained and enduring. We believe a cheap and make-shift job upon the streets and avenues, subject as they are to constant and hard usage, is time and money thrown away. What is to be done let it be well done, and what is of equal importance, when well done let it remain. Complaints that I fear were only too well founded have been made that in more than one instance soon after a street had been put in excellent condition by the street department there followed the sewer or water departments, or the Gas-Light Company, uprooting the street and practically destroying the good work done, thus substantially wasting the funds of the city.

I commend to your good judgment and careful investigation the solvable problem of so fore-casting the future —all departments acting in harmony and to a certain degree inter-dependent upon each other—that similar occurences shall not be debated and our several departments unfavorably criticized and blamed by the citizens at large.

The worthy Superintendent of Streets has labored against elemental difficulties seldom paralleled. It is almost impossible to preserve the streets in good order when rain falls as it has at such frequent intervals, and in great quantities, since August last. Liberal allowances must be made for the difficulties encountered in the proper and successful prosecution of work in this department the past season.

The several recommendations of the Superintendent are of an important nature, and the matters named should have your early attention.

The Steam Roller is said to have met fully the expectations of those who advised its purchase.

The expense of maintenance and salary of Engineer, covering a period of 32 working weeks, everything included, was $1,802.25, equal to $9.38 per day.

GRAVEL FOR ROAD MAKING.

The so-called gravel now only available for road-making purposes is so largely composed of alluvial and of clay as to render it unfit for the purpose. It is carted upon the streets at a heavy cost in the fall, a further expenditure made of work, mechanical and otherwise, and in the spring what has not already blown away is carted off again. Under favorable conditions it is converted into intolerable dust or pestilent mud.

A good gritty gravel should be secured for surfacing, without fail, for next season.

ELECTRIC LIGHTS, AND STREET LIGHTING.

The Superintendent of Lamps reports 102 electric arc lights furnished under contract with the Electric Light Company of this city, for street lighting, at a stated cost of $180 each per annum. Contract runs 3 years from April 1, 1888.

The actual cost of gas street lights has been eight cents each per night, and for kerosene, five cents. His recommendation that the street lamps be lighted each and every night is worthy of your consideration. Total expense of this department for the financial year $41,386.16.

GIFTS OF MR. RINDGE.

The munificent generosity of Mr. Rindge has been so completely, and so becomingly acknowledged by ex-Mayor Russell, that nothing remains for me to say in this connection, except to confirm his well rounded measures of thanks to the donor, in behalf of the citizens of Cambridge.

NEW CITY HALL.

We are informed that contracts have already been signed for the building of the new City Hall, that work will be commenced on the breaking up of winter and the structure probably completed within eighteen months thereafter.

POLICE DEPARTMENT.

The general exellence of this force must be admitted. An ideal police service would demand that its ranks must be made up of picked men, chosen because of their qualifications, mental, moral, and physical; a corps of experts, having a common ambition to be the best, and in peaceful contention striving to disclose "who best can work, and best agree." The civil service regulations furnish very complete methods for securing to this service a mental, and physical model. It is less certain in some other respects. Experience with a policeman alone can develop the qualities of his mind. Does he sufficiently realize that the security of properity, the personal safety, perhaps the lives of citizens depend to a greater or less degree upon his alertness, descretion, good judgment often instantly demanded, his faithful vigils, a sturdy and incorruptible integrity that will protect him against the blandishments or inducements of law-breakers of whatever stamp?

Without these qualities of mind and heart, whoever he is, his usefulness as a policeman will never begin. The force might be deprived of his services without detriment.

Remember "the same public opinion that controls law, that gauges the efficiency of public servants, also protests against lawlessness, and the domination of the law-breaker."

"A policeman stands between two fires. If he does not do his duty from sympathy with the felon, he receives the condemnation of those who desire to see the law enforced, and receives the thanks of those only whom he fears and who inwardly despise him; whereas, if he does his duty, he has to listen to the threats and caustic remarks of those who wish to use him as a tool, and the law-abiding citizens rarely thank him for his efforts."

For the present year especially meritorious action, when performed in the line of duty, by any member of the force, on report reaching me through the proper official channels, will be publicly announced and approved by the Mayor.

The efficiency of this semi-military force depends largely upon strict discipline. A prompt and cheerful obedience to orders from all superior officers, through whom all requests, and grievances, if any, must come to the Mayor, harmonious relations one with another, a manly pride in the discharge of every duty, decorous behavior, and a respectable speech united with a neat and self-respecting appearance whilst on duty, will all tend to the best results, and will assuredly level the force up to the just expectations of a critical public.

A policeman may be said to owe all his time to the city, and he should keep himself just as far above reproach out of as in uniform. The Chief of Police is the commanding officer, and in the lawful discharge of duty his orders must be respected and obeyed by all members of the department.

MATRONS AT POLICE STATIONS.

The Chief of Police reports his satisfaction with the performance of duty on the part of the matrons at stations, and to me has commended them for their discretion and faithfulness.

The delicate nature of this service, on many occasions, can properly be performed only by one of the gentler sex, and the voice of the Commonwealth proclaims by our statutes that the people will not permit the proprieties of life to be necessarily violated by the authorized agents of the law.

ELECTRIC POLICE SIGNALS.

As the result of personal inspection, together with the unqualified approval of some of the most efficient heads of police departments, I favor the introduction of a Police Signal System.

Any one who will witness the practical working of this apparatus must become convinced of its great utility, if not of its absolute necessity.

I trust the Committee on Police will further and fully investigate this matter, with a view to making such recommendations to the City Council as may be for the best.

CITY ORDINANCES.

An important as well as necessary step has been authorized by our predecessors in placing the City ordinances in judicial hands for revision and codification. This undertaking will require time, ability and patient attention on the part of the Committee on Ordinances of whom the City Council will confidently expect good results.

LIQUOR LAW.

With an increased majority for the third time consecutively our people have wisely voted no-license. The evidences abound on every side of the benefits following the banishment and abandonment of the liquor saloons. Premises formerly devoted to this use have gradually become occupied for respectable business purposes. They no longer afford a rallying point for idle men, and the young, not vicious, but looking for companionship and possibly for sympathy, who were likely to drift into the company of persons frequenting those places, having bad reputations, inclined to wickedness, and who sooner or later, overstepping the bounds of law, fall into the hands of the police, to find their trial and sentence in our District Court.

In 1884 there were twenty-one cities, since increased by the addition of Northampton, Waltham, Woburn and Quincy. Only three of the older cities then gave majorities against license, namely, Malden, Newton and Somerville. At the late election six of the older cities gave majorities against license, to say, Brockton, Gloucester, Malden, Newton, Somerville and Cambridge, some of them by an increased negative vote, whilst one of the new cities, Quincy, started on her municipal career in the right column.

It is possible, and probable, in some of the cities where the people voted first against license, that they were influenced to a contrary course because the law was not faithfully enforced.

We may not labor especially with those who want intoxicating liquor and will have it, but we must protect the young men, and the workingmen who may be enticed away from their own good resolutions by the saloon, its cheerful fire in winter, its well-sanded floor and comfortable chairs, its attractive and extensive bar, covered with sparkling and alluring paraphernalia, which the workingman's money has paid for chiefly, and his money principally supports.

Under no-license it is to be hoped every man, young or old, who has a spark of honest manhood within him, will shun the holes and "dives" where intoxicating liquors may be secretly sold in defiance of law. Exercise self-control for the sake of securing good health, a clean conscience, with promise of long life as a reward. The consciousness of having successfully struggled to overcome a debasing and destructive appetite is, and always will be a source of never-ending happiness, and laudable pride. Try it, you who are tempted, and may the prayers of all good men and women fortify and sustain you in the struggle.

I quote from the last annual message of my predecessor: "The (liquor) law has been enforced. It *can* and *must* be enforced. The same earnest work and unceasing vigilance will be expected and required this year. Any officer who neglects, evades or shirks this duty will be held to strict account."

I adopt and re-affirm these declarations.

BRIDGES—WEST BOSTON, CANAL AND PRISON POINT.

The excellent management and care exercised by Commissioner Marvin over his trusts demand recognition.

His assurance that the piles supporting these bridges (an examination by divers having been made) have not been injured by the pile-worm, and that they are still substantially in good condition, will gratify the public, and allay anxiety concerning the safety of these structures.

WATER DEPARTMENT.

The blessings we enjoy in having pure water, enough of it, and an unexceptional place for holding a supply against any possible contingency that can be foreseen or imagined, call for a general expression of gratitude to the Giver of perfect gifts.

To command the forces and avail of the circumstances which, under able leadership and good councils, have conspired to secure our admirable and abundant water supply, the man was raised up to answer that demand in the honorable president of the water board. To him and to all others connected with the inception, development and completion of our unexcelled water system, the people of Cambridge will remain under lasting obligations.

Whenever the revenues of the water department will justify it I recommend a reduced rate for metered water. The water tax paid by some of our leading industries is very heavy, and as it is for the material interest of Cambridge to encourage the location of manufacturing plants which shall give employment both to skilled and unskilled labor, a moderate, or low water rate coupled with reasonable rates of taxation upon property, would offer strong inducements to those seeking a location for such enterprises.

New England struggles still less successfully year after year to maintain her supremacy in manufacture. The men of the West imitate more and more closely the systematic, the conservative, clear-cut, and provident methods of our Eastern people, and Nature adds to their other advantages gas-fields of apparently inexhaustible volume, with seams of coal of almost every variety, and in boundless measures.

It is for us to heed the plaint of the proprietors of our shops, and mills, and factories, and render them whatever relief is in our power, having due regard to all other interests.

The reports submitted by the Water Board show the *net* revenue from water service (after paying interest upon bonded water debt and all other expenses) to equal

3 per cent interest upon the entire cost. If the amount used by the various city departments had been charged for as heretofore, the net income would have equalled $3\frac{60}{100}$ per cent, and this is a very creditable and satisfactory showing. Included in the general expenses is interest on bonded debt of Water Works.

When we reflect upon the fact that the water supply is assured for many years to come, that in the natural order of things the demand for additional service will bring an equivalent and large increase in revenue, we are satisfied the Water Works will be considered one of the most valuable of the city's assets.

By the exercise of constant care the consumption and waste of water is kept at a low per capita average. For domestic uses the quantity served for each individual equalled in 1887 about $47\frac{2}{3}$ gallons. For 1888 the quantity served for same purposes was $44\frac{58}{100}$ gallons. Let credit be given to whom credit is due.

The very elaborate and comprehensive report submitted to the City Council by the Water Board, exhibiting in the clearest and completest manner the whole business of that department, deserves to be carefully read by you and by all the citizens. I respectfully ask your attention to the requests and recommendations therein contained.

SEWER DEPARTMENT.

There has been expended the past year $41,164.79 in constructing $2\frac{829}{1000}$ miles of sewers, making the total length of sewers within the city $80\frac{97}{100}$ miles. Several additions to the system are contemplated and the particulars in relation to them are conveyed by the City Engineer in his report, to which your attention is respectfully urged.

METROPOLITAN SEWERAGE SYSTEM.

City Engineer Barbour says: "It is understood that the Board of Health of the state, to whom this matter was referred, will report a scheme to the Legislature of 1889. Copies of the plan have already been submitted to the city authorities.

"So far as they have been examined and studied they seem to meet the requirements and conditions of the case. It is desirable that early action be taken in this matter, which is of vital importance to the health of the community."

His Excellency the Governor says in his annual message: "The statutes enacted by the Legislature from time to time for the protection of the public health appear to have been successfully enforced under the direction of the State Board. The question of a system of drainage for the valley of the Mystic, which was referred by the Legislature of 1887 to the State Board of Health, with directions to report to the Legislature of 1889, has, so far at least as the system to be adopted is concerned, been decided upon by that board, and no objections have thus far been urged against the plan itself. How the large sums of money necessary for the construction of the sewer proposed are to be raised, and the manner in which the burden shall be apportioned among the interested municipalities, are very serious questions which will engage the attention of the Legislature. Inasmuch as one-sixth of the inhabitants of the State live in this district, and a much larger proportion are vitally affected by its sanitary conditions, the question becomes one of unusual importance."

It is quite within the range of possibilities that the present City Council may be called upon to consider and pass upon this important matter.

CITY ALMSHOUSE.

This intelligent and conscientious community believes the most poverty-stricken and friendless of our people, however brought to suffering through privation and want, to be as justly entitled to pure air, wholesome food, uncontaminated water and the means of personal cleanliness, as are those on whom fortune has lavished her favors.

We believe the Board of Overseers of the Poor has for a term of years recognized this principle of natural law, and by gradual gradation has mitigated and improved the system under its control so that today whilst not able to create all that might be desired, yet the tone and the prevailing influences have been elevated to a higher level in harmony with the progressive ideas of the age.

The records and accounts of this department are models of accuracy and system, and reflect great credit upon those having them in charge.

CAMBRIDGE CEMETERY.

The improvements planned, executed, and those projected for the Cambridge Cemetery it is believed will satisfy a reasonable public desire.

A new, substantial, and creditable receiving-tomb of ample dimensions has been erected at a cost of about $3557, and this meets what was a pressing necessity.

SOLDIERS' MONUMENT.

After years of delay the public is inclined towards some action, corporate or private, or still better, both acting in accord, calculated to complete and perfect the Soldiers' Monument on Cambridge Common, in accordance with the plans of its accomplished designer, himself a veteran.

Our people cannot forget, nor have they the disposition to avoid any just claims made upon them to fulfil all the obligations, stated or implied, which resulted from circumstances connected with the war of the Rebellion, and the sensitive survivors of those who participated in that great and decisive struggle, I feel sure, would gratefully appreciate this further evidence of our undiminished regard for them, "for what they were and what they are," by completing this graceful and enduring monument to the valor and patriotism of all who faithfully served in the war for the Union.

FIRE DEPARTMENT.

Praise is due to the engineers, officers and men of this department. Their tasks require a rally on the instant of an alarm, the utmost activity in reaching the threatened locality, courage of the highest order under peril, and these qualities can only be displayed by gallant men. The value of the services of this vigilant and intrepid corps is patent to every observer.

Let it continue to be the constant effort of all thereto connected, not alone to maintain the high reputation it has enjoyed, but to emulate the highest standard of discipline and efficiency anywhere known.

The Chief renews his recommendation that telephonic communication be established with the several houses used by the department, so that in case of accident to the electric alarm service, the telephone may be used in transmitting orders promptly and intelligibly.

He reports the engines and apparatus to be in excellent condition, generally, but recommends the purchase of a new hook and ladder carriage, as a spare truck, and suggests needed repairs upon both of the old ones. A new fuel wagon is also needed, the one in present use being unfit, and really not worth repairing.

The roll-call of the fire force shows ninety-nine officers and men.

FIRE LIMITS.

I recommend you to consider the expediency of establishing fire limits, within the boundaries of which only buildings practically fire-proof externally may hereafter be erected, and respectfully suggest those sections of the city embracing portions of Harvard Square and Central Square as those to which this protection might be extended. An ordinance drawn under the authority of Chapter 104, Revised Statutes, will meet the case if deemed expedient.

HARVARD BRIDGE.

The assurance of the Commissioners that this bridge will be completed and ready for use on or before July 4th, next, suggests the propriety of making that day still more memorable by dedicating this massive and spacious structure to the uses of the public on that date, and in conjunction with the City of Boston.

It will be within your province to set apart from the revenues of the city for this purpose such a sum of money as to your good judgment may appear proper and necessary.

FRONT STREET TO HARVARD BRIDGE.

The great prospective value and importance of this new avenue to Boston, 90 feet in width, destined to endure for many years and probably many generations, cannot be denied, and is not likely to be overestimated.

Reflecting upon the permanent establishment of this thoroughfare the thoughtful inquiry may occur to many of our people, why not have *one* road leading to the Capitol which shall not cross a steam railroad at grade? The elements of danger through collision, or vexatious delay to travel occasioned by the passing trains (the frequency with which they follow each other is sure to be increased as time rolls on) would then be avoided. Moreover the surface of a road-bed slightly inclined from a plain assists drainage, and tends to modify the expense of repairs.

It is not too late to make a change of grade, and I have no doubt the Boston and Albany Railroad Corporation would willingly erect the abutments and bridge, and also contribute liberally towards the expense of retaining walls and extra filling. The Railroad Company would thus escape the constant risks, the everlasting expense of gate keeping, and such other costs as are certain and incidental to a grade crossing so thoroughly used by the public as this would be.

It is safe to say the traffic of the steam road has more than doubled within fifteen years, and many things point to a larger relative increase in the future. Probably a third track may be put down at no very distant day.

Today, Front Street, as projected, for nearly its whole length runs through unimproved marsh land, with no buildings erected, no grade for buildings permanently established, no intersecting streets completed. For these and other obvious reasons this would certainly appear to be the time when only nominal and minimum damages could justly be claimed by owners of abutting lands.

Let the judgment of today find confirmation and approval from those who are to come after us.

Permit me to urge the reference of this matter to a joint special committee who shall investigate fully and make such recommendations to the City Council as may be deemed expedient.

In this connection it may be well to allude to the expressed wish of some of our citizens that the plot of land lately owned by the First Universalist Church and taken by the City, or so much of it as will not be taken for Front Street, may be held for a small park. A few years hence, if the authorities should care to dispose of this area of land, or any considerable portion of it, the then enhanced value will have made it a profitable business operation for the city.

BUSINESS.

The taxpayer has a right to demand a fair equivalent for his money, whether it be in materials, services, or labor. If any department fails to exact standard quality, full weight or measure, or any salaried person neglects or inefficiently performs his duty, or the man who is paid for a fair day's work fails to deliver it, the observant citizen is likely to detect the wrong, and all who are charged with the administration of affairs suffer in the general condemnation.

OFFICIALS AT CITY HALL.

From an acquaintance, more or less intimate with all of the aids to government who are annually elected, rather re-elected by the City Council, with offices at the City Hall, begun in most cases when myself a member of the government quite ten years ago, I am glad to speak of them, one and all, in terms of high commendation. Each fitted as by nature to the position he fills, their courteous, faithful, prompt and intelligent discharge of every duty materially assists in the proper and regular despatch of City business.

DEPARTMENT OF PUBLIC BUILDINGS—INSPECTOR OF BUILDINGS.

More extended experience sufficiently justifies the establishment of these departments.

The two reports relating to these branches of the public service are worthy of your attention.

A SUGGESTION.

As all the citizens join in paying for services rendered to or on behalf of the City, it is wholly unjustifiable, especially whilst on duty, to take up the cause of one reputable citizen against another. Whilst every person in City employ has the unquestioned right to his own choice, and his own vote, and the further right to give an unprejudiced expression of opinion, his sense of duty to others, to himself, and loyalty to his department should prevent active and offensive participation in elections.

Chapter 320, Acts of 1884, Sec. 10.

"No person in the service of the state or any city thereof shall use his official authority or influence, either to coerce the political action of any person or body, or to interfere with any election." The law makes the offender liable to a fine of not less than one hundred nor more than one thousand dollars for each offence.

OUR CITY.

To those who know and love Cambridge it is needless to rehearse the advantage of her location — the attractiveness of her homes — the high order of intellectual development among her people — the imperious demand of her citizens to have abjured whatever impoverishes and degrades — her noble charities — excellent schools of every grade — the number and quality of her church organizations, supplemented by the noble and elevating work of the Young Men's Christian Association.

To sustain health and promote long life she offers to her population uncontaminated water unsurpassed in quality. Her wide streets and avenues, lined with beautiful shade-trees in great variety of form and foliage afford superior channels for the circulation of air, and admission of the sun's rays, both so essential to health. Her mortality rate compares favorably with any other city in New England.

Her ancient and venerated University stands an honor, and is the pride of Cambridge,—its influence world-wide. The means of communication with Boston will soon be made more convenient, rapid, comfortable and agreeable. This in connection with all else that Cambridge is and has, an investigation will verify, and cannot fail to interest and attract those who can appreciate all these comforts and blessings of life, and are seeking to establish a new home.

FINALLY.

Actuated, as I am assured we all are, by a resolute desire to serve all the people of our city with partiality for none, with truth and frankness for all, by plain methods, and on straight lines, the opportunity is upon us to reveal our capacity, our devotion to duty, and our faithfulness to the trusts bestowed upon us by the citizens of Cambridge.

It is for us to disclose

> "In what a forge, and what a heat
> Were shaped the anchors of our hope."

ANNUAL REPORT.

OF THE

AUDITOR OF ACCOUNTS.

City of Cambridge,
Auditor's Office, Dec. 24, 1888.

To the Honorable City Council:—

Gentlemen: In compliance with the provisions of Section 4, Chapter 1, of the city ordinances, the undersigned herewith presents the forty-second annual report of the receipts and expenditures of the City of Cambridge for the year ending November 30th, 1888, exhibiting the same as classified in the several department accounts, with other information.

RECEIPTS.

The receipts of the year, as credited to the several city accounts, are as follows:—

NO.		
1.	Betterments, Washington Avenue	$644 00
2.	Bridge, Harvard	7,395 00
3.	Bridges, West Boston, Craigie's and Prison Point	387 81
4.	Cambridge Cemetery	11,618 24
5.	Cambridge Public Library	4,517 12
6.	Cemetery Fund	2,400 00
7.	City Buildings, care and repairs	1,980 72
8.	City Hall Land	10,489 85
9.	City Lands	7,228 80
10.	Engineering	1,010 00
11.	Fire Department	1,191 73
12.	Incidental Expenses	4,358 50
13.	Interest	7,590 98
	Amount carried forward	$60,812 75

	Amount brought forward	$60,812	75
14.	Lighting Streets	113	19
15.	Loan, Bridge	200,000	00
16.	Loan, Land	83,000	00
17.	Loan, Temporary	400,000	00
18.	Loan, Water	73,000	00
19.	Notes Receivable	1,303	94
20.	Pauper Department	3,952	42
21.	Pauper Department, Almshouse	10,894	56
22.	Pauper Department, House Offal	6,721	50
23.	Police Department	5,962	99
24.	School Department, Salaries	1,033	11
25.	School Department, Text-Books and Supplies	249	11
26.	Sewers, Construction	16,573	52
27.	Sewers, Construction, Bath Street	30	00
28.	Sewers, Maintenance	1,904	80
29.	Shade Trees and Public Grounds	108	58
30.	State Aid	10,979	50
31.	Street Department, Paving	6,151	37
32.	Street Department, Repairs	2,061	49
33.	Street Department, Watering	12,052	84
34.	Street Department, Widening, Front Street	3,500	00
35.	Tax, Corporation	51,289	26
36.	Tax, National Bank	16,887	57
37.	Tax, Lien Account	166	76
38.	Taxes, 1881	4	00
39.	Taxes, 1882	16	00
40.	Taxes, 1883	180	00
41.	Taxes, 1884	315	36
42.	Taxes, 1885	581	05
43.	Taxes, 1886	4,028	50
44.	Taxes, 1887	71,272	80
45.	Taxes, 1888	909,639	50
46.	Water Works, Construction	620	00
47.	Water Works, Construction, Fresh Pond Land	62	65
48.	Water Works, Construction, Stony Brook	2,377	00
49.	Water Works, Interest on Water Loan	228	00
50.	Water Works, Rates, Fines, etc.,	217,656	73
	Amount carried forward	$2,175,730	85

	Amount brought forward	$2,175,730	85
51.	Water Works, Trustees of Sinking Fund	175,000	00
52.	Water Works, Supplies	6,183	32
		$2,356,914	17

EXPENSES.

The disbursements of the year, as charged to the several city accounts, are as follows:—

NO.			
1.	Abatements, Taxes	$21,667	20
2.	Bridge, Harvard	121,740	75
3.	Bridges,	2,777	28
4.	Bridges, West Boston, Craigie's and Prison Point	5,591	82
5.	Cambridge Cemetery	15,104	07
6.	Cambridge Cemetery, Receiving Tomb	3,881	57
7.	Cambridge Public Library	7,299	62
8.	Cambridge Public Library, Trust Fund	1,000	00
9.	Cemetery Fund, Trustees of	2,400	00
10.	City Buildings, care and repairs	11,241	85
11.	City Hall Land	93,524	67
12.	Discounts, Taxes	25,366	53
13.	Engineering	8,667	20
14.	Fire Department	54,000	59
15.	Fire Department, New Building for H. and L. Truck No. 2	7,135	77
16.	Health Department	3,011	36
17.	Incidental Expenses	32,770	28
18.	Interest	106,982	69
19.	Lighting Streets	41,386	16
20.	Loan, Temporary	400,000	00
21.	Loan, Water	175,000	00
22.	Pauper Department	29,283	35
23.	Pauper Department, Almshouse	26,140	79
24.	Pauper Department, Almshouse, New Buildings	5,488	31
25.	Pauper Department, House Offal	17,613	50
	Amount carried forward	$1,219,075	36

	Amount brought forward	$1,219,075	36
26.	Police Department	86,308	25
27.	Salaries	26,941	66
28.	School Department, Drawing Schools	1,403	07
29.	School Department, Evening Schools	848	50
30.	School Department, Incidental Expenses	604	31
31.	School Department, Industrial School	411	59
32.	School Department, Salaries	175,773	80
33.	School Department, Text Books and Supplies	10,936	86
34.	School Houses, care and repairs	36,063	73
35.	School Houses, Land for High School House	100	00
36.	School Houses, Land for Peabody School House	6,825	00
37.	School Houses, New and Furniture, Peabody	5,303	74
38.	School Houses, New and Furniture, Putnam	10,454	74
39.	School Houses, Webster School House, Plumbing	2,029	87
40.	Sewers, Construction	22,709	88
41.	Sewers, Construction, Bath Street	13,857	95
42.	Sewers, Construction, Front Street	535	84
43.	Sewers, Maintenance	28,385	63
44.	Shade Trees and Public Grounds	4,630	60
45.	Sinking Funds	51,145	00
46.	State Aid	11,811	90
47.	Stationery and Printing	3,990	86
48.	Street Department, Extension of Charles River Street	100	00
49.	Street Department, Extension of De Wolfe Street	200	00
50.	Street Department, Extension of Winsor Street	5,554	73
51.	Street Department, Paving	14,996	00
52.	Street Department, Paving Main Street	18,239	88
53.	Street Department, Paving, North River Flagging Stone	1,113	26
54.	Street Department, Repairs	101,054	25
55.	Street Department, Sea Wall on Charles River at Mill Pond	3,426	60
	Amount carried forward	$1,864,832	86

	Amount brought forward	$1,864,832 86
56.	Street Department, Watering	16,033 35
57.	Street Department, Widening Front Street	34,488 45
58.	Street Department, Widening Inman Street	1,150 00
59.	Street Department, Widening Main Street	504 87
60.	Tax, County	39,342 40
61.	Tax, National Bank	5,804 11
62.	Tax, Lien Account	518 08
63.	Tax, State	70,110 00
64.	Water Works, Construction	24,876 84
65.	Water Works, Construction, Fresh Pond Land	15,400 57
66.	Water Works, Construction, Stony Brook	63,006 09
67.	Water Works, Interest on Water Loan	89,765 00
68.	Water Works, Maintenance	41,951 32
69.	Water Works, Rates, Fines, etc., Abatements	3,842 78
70.	Water Works, Rates, Fines, etc., Refunds	2,002 73
71.	Water Works, Sinking Funds	56,999 42
72.	Water Works, Supplies	5,216 31
73.	Water Works, Supplies, Abatements	33 65
		$2,335,878 83

Total Receipts for the year			$2,356,914 17
Amount in treasury December 1, 1887			125,068 68
			$2,481,982 85
Total expenditures for the year			2,335,878 83
Balance in treasury November 30, 1888			$146,104 02
From which deduct balance unexpended from sale of bonds—			
Bridge Loan	$61,770 62		
Sewer Loan	106 35		
Fresh Pond Land Loan	1,268 78		
Stony Brook Loan	15,403 23		
		$78,548 98	
Amounts carried forward		$78,548 98	$146,104 02

Amounts brought forward		$78,548 98	$146,104 02
And balance unexpended on account of contracts begun and not completed: —			
Peabody Sch'l House	$17,196 26		
Extension of Charles River Street . .	1,000 00		
Extens'n of De Wolfe Street	1,600 00		
Widening of Inman Street	1,450 00		
Sea Wall on Charles River at Mill Pond	1,073 40		
		$22,319 66	
			$100,868 64
Leaving a net balance of			$45,235 38

There has been an addition to the City Funded Debt during the year of $283,000, caused by the issue of coupon bonds, as follows:

Bridge Loan, dated July 2, 1888, payable in thirty years, at an annual interest of four per cent (Harvard Bridge)	$100,000 00
Bridge Loan, dated Sept. 1, 1888, payable in thirty years, at an annual interest of four per cent (Harvard Bridge)	50,000 00
Bridge Loan, dated Sept. 1, 1888, payable in thirty years, at an annual interest of four per cent (widening, extension and laying out Front Street as an Avenue to Harvard Bridge)	50,000 00
Land Loan, dated Aug. 1, 1888, payable in ten years, at an annual interest of four per cent (lot of land for the New City Hall)	83,000 00
	$283,000 00

Of the Water Debt of the City there have matured during the year bonds amounting to	$175,000 00

There has been an addition to the Water Debt of the City during the year of $73,000.00, caused by the issue of coupon and registered bonds, payable in twenty years, at an annual interest of four per cent (Stony Brook Additional Water Supply)	$73,000 00

THE CITY DEBT.

		1887.	1888.
Funded City Loan		$1,616,000 00	$1,899,000 00
Contingent Loan, being a City Note to the Trustees of Sinking Fund of Water Works . . .		200,000 00	200,000 00
Trust Funds :—			
Dowse Institute Fund .	$10,000		
Sanders Temp. Fund .	10,000		
Daniel White Charity	5,000		25,000 00
Fay Fund (pd. in 1888)	1,000	26,000 00	
Gross City Debt		$1,842,000 00	$2,124,000 00
Less amount in City Sinking Fund		428,564 59	499,968 28
Net City Debt		$1,413,435 41	$1,624,031 72
The increase of the net city debt from last year			$210,596 31
		$1,413,435 41	$1,413,435 41

WATER WORKS DEBT.

	1887.	1888.
Funded Water Loan	$1,825,500 00	$1,723,500 00
Less Water Sinking Fund . . .	838,597 01	753,942 00
	$986,902 99	969,558 00
The decrease of the net water debt from last year		17,344 99
	$986,902 99	$986,902 99

THE FUNDED CITY DEBT.

Following is a statement of the total funded debt of the City, with the dates of maturity and rates of interest thereon:—

Bridge Loan.

Due Oct. 1, 1917,	int. 4 per cent,	30 yrs.	$10,000	
July 1, 1918,	“ 4 “	30 “	100,000	
Sept. 1, 1918,	“ 4 “	30 “	100,000	
				$210,000 00

City Loan.

Due April 1, 1889,	int. 5 per cent,	25 yrs.	$100,000	
July 1, 1890,	“ 6 “	20 “	20,000	
Jan. 1, 1893,	“ 5 “	30 “	150,000	
				$270,000 00

Land Loan.

Due July 1, 1893,	int. 6 per cent,	20 yrs.	$10,000	
Aug. 1, 1898,	“ 4 “	10 “	83,000	
				$93,000 00

Paving Loan.

Due July 1, 1893,	int. 6 per cent,	20 yrs.	$100,000	
July 1, 1894,	“ 6 “	20 “	130,000	
July 1, 1895,	“ 6 “	20 “	25,000	
				$255,000 00

Sewer Loan.

Due Oct. 1, 1895,	int. 6 per cent,	20 yrs.	$20,000	
July 1, 1896,	“ 6 “	20 “	29,000	
July 1, 1903,	“ 6 “	30 “	136,000	
July 1, 1904,	“ 6 “	30 “	295,000	
July 1, 1905,	“ 6 “	30 “	144,000	
Nov. 1, 1896,	“ 3½ “	10 “	25,000	
Nov. 1, 1907,	“ 4 “	20 “	30,000	
				$679,000 00

Street Loan.

Due July 1, 1893,	int. 6 per cent,	20 yrs. . . .		13,000 00
Amount carried forward				$1,520,000 00

Amount brought forward $1,520,000 00

Street Widening Loan.

Due July 1, 1903,	int. 6	per cent,	30 yrs.	$10,000	
July 1, 1904,	" 6	"	30 "	90,000	
July 1, 1905,	" 6	"	30 "	14,000	
					$114,000 00

Municipal Loan.

Due April 1, 1895, int. 4 per cent, 10 yrs. . . . $200,000 00

Cambridge Cemetery Loan.

Due Aug. 1, 1905, int. 4 per cent, 20 yrs. . . . $65,000 00

Total Funded City Loan $1,899,000 00

Water Loan.

Due May 1, 1889,	int. 6	per cent,	20 yrs.	$112,000	
July 1, 1890,	" 6	"	20 "	60,000	
May 1, 1891,	" 6	"	20 "	50,000	
July 1, 1892,	" 6	"	20 "	335,000	
April 1, 1894,	" 6	"	20 "	150,000	
Nov. 1, 1894,	" 4	"	10 "	36,000	
April 1, 1895,	" 6	"	20 "	160,000	
July 1, 1896,	" 6	"	20 "	103,000	
July 1, 1897,	" 6	"	20 "	16,000	
July 1, 1898,	" 5	"	20 "	12,500	
May 1, 1910,	" 4	"	25 "	288,000	
April 1, 1911,	" 3½	"	25 "	100,000	
July 1, 1911,	" 3½	"	25 "	75,000	
Nov. 1, 1906,	" 3½	"	20 "	43,000	
Oct. 1, 1907,	" 4	"	20 "	75,000	
Oct. 1, 1907,	" 4	"	20 "	15,000	
Nov. 1, 1907,	" 4	"	20 "	22,000	
July 1, 1908,	" 4	"	20 "	46,000	
Aug. 1, 1908,	" 4	"	20 "	25,000	

Total funded Water Debt $1,723,500 00

Recapitulation.

Amount of funded City Loan upon which interest is at 6 per cent	$1,036,000 00
Amount of funded City Loan upon which interest is at 5 per cent	250,000 00
Amount of funded City Loan upon which interest is at 4 per cent	588,000 00
Amount of funded City Loan upon which interest is at $3\frac{1}{2}$ per cent	25,000 00
	$1,899,000 00

Amount of Water Loan upon which interest is at 6 per cent	$986,000	
Amount of Water Loan upon which interest is at 5 per cent	12,500	
Amount of Water Loan upon which interest is at 4 per cent	507,000	
Amount of Water Loan upon which interest is at $3\frac{1}{2}$ per cent . . .	218,000	
		$1,723,500 00

The following is a statement of the temporary loans negotiated during the year and the rates of interest on the same :—

Feb. 1, 1888,	$5,000,	int.	$4\frac{1}{2}$	per cent, payable	Oct.	10, 1888.
Feb. 1, "	45,000,	"	$4\frac{5}{8}$	" "	"	10, "
Feb. 29, "	75,000,	"	$4\frac{1}{4}$	" "	"	11, "
Mch. 12, "	50,000,	"	4	" "	"	11, "
Mch. 12, "	50,000,	"	$4\frac{1}{2}$	" "	"	11, "
Mch. 30, "	100,000,	"	$4\frac{5}{8}$	" "	"	12, "
Apr. 27, "	25,000,	"	$4\frac{1}{8}$	" "	"	12, "
July 24, "	50,000,	"	$3\frac{3}{8}$	" "	"	12, "
	$400,000					

ASSETS.

Cemeteries	$79,750 00
Debts due the city, consisting of Taxes, Sewer and Sidewalk Assessments and Betterments	149,795 19
Fire Apparatus	76,000 00
Public Buildings and Lands (Assessors' valuation)	1,148,000 00
Sinking Funds	1,253,910 28
Water Works	2,500,000 00
	$5,207,455 47

LIABILITIES.

Bonds	$3,622,500 00
Notes	200,000 00
Trust Funds	25,000 00
	$3,877,500 00

STATEMENT showing the Appropriations for the current financial year, the Amount of Appropriations and Estimated Revenue, the Receipts and Expenditures to December 1, 1888, and the Balances unexpended at that date.

City Department Accounts.	Receipts.	Estimated Revenue.	Appropriat'ns.	Appropriat'ns and Estimated Revenue.	Expended to Date.	Balances Unexpended
Abatements (Taxes)			$21,667 20	$21,667 20	$21,667 20	
Bridge (Harvard)	$7,395 00		†204,499 82	†204,499 82	121,740 75	$82,759 07
Bridges			3,000 00	3,000 00	2,777 28	222 72
Bridges (West Boston, Craigic and Prison Point)	387 81	$400 00	6,300 00	6,700 00	5,591 82	1,108 18
Cambridge Cemetery	11,618 24	16,000 00				
Current Expenses				15,118 43	15,104 07	14 36
Receiving Tomb			3,000 00	3,881 57	3,881 57	
Cambridge Public Library	4,517 12	4,500 00	2,817 12	7,317 12	7,299 62	17 50
Cambridge Public Library (Trust Fund)			1,000 00	1,000 00	1,000 00	
City Buildings (Care and Repairs)	1,980 72	2,000 00	9,300 00	11,300 00	11,241 85	58 15
City Hall Land	10,489 85	11,000 00	†83,000 00	†94,000 00	93,524 67	475 33
Discounts (Taxes)			25,366 53	25,366 53	25,366 53	
Engineering	1,010 00	1,000 00	7,667 20	8,667 20	8,667 20	
Fire Department:—						
Ordinary Expenses	1,191 73	1,040 90	52,959 69	54,000 59	54,000 59	
New Building for H. & L. Truck, No. 2			7,135 77	7,135 77	7,135 77	
Health Department			3,500 00	3,500 00	3,011 36	488 64
Incidental Expenses	4,358 50	3,500 00	29,270 28	32,770 28	32,770 28	
Interest	7,590 98	2,000 00	111,057 25	113,057 25	106,982 69	6,074 56
Lighting Streets	113 19	250 00	44,000 00	44,250 00	41,386 16	2,863 84
Pauper Department	3,952 42	4,000 00	25,283 35	29,283 35	29,283 35	
Pauper Department (Almshouse)	10,894 56	6,500 00	19,640 79	26,140 79	26,140 79	
Pauper Department (Almshouse, New Buildings)			5,500 00	5,500 00	5,488 31	11 69
Pauper Department (House Offal)	6,721 50	6,000 00	11,921 50	17,921 50	17,613 50	308 00
Police Department	5,962 99	6,000 00	82,000 00	88,000 00	86,308 25	1,691 75
Salaries			26,941 66	26,941 66	26,941 66	
School Department (Drawing Schools)			1,425 00	1,425 00	1,403 07	21 93
School Department (Evening Schools)			950 00	950 00	848 50	101 50
School Department (Incidental Expenses)			700 00	700 00	604 31	95 69
School Department (Industrial School)			500 00	500 00	411 59	88 41
School Department (Salaries)	1,033 11	800 00	175,233 11	176,033 11	175,773 80	259 31
School Department (Text-Books and Stationery)	249 11	300 00	11,000 00	11,300 00	10,936 86	363 14
School Houses (Care and Repairs)			36,215 39	35,215 39	36,063 73	151 66
School Houses (Land for High School House)			20,100 00	20,100 00	100 00	20,000 00
School Houses (Land for School House on Linnæan Street)			6,825 00	6,825 00	6,825 00	
School Houses (New and Furniture, Peabody School House)			22,500 00	22,500 00	5,303 74	*17,196 26
Amounts carried forward	$79,466 83	$65,290 90	$1,072,276 66	$1,126,567 56	$993,195 87	$134,371 69

STATEMENT showing the Appropriations, Receipts, Expenditures, etc., to December 1, 1888.—Continued.

City Department Accounts.	Receipts.	Estimated Revenue.	Appropriat'ns.	Appropriat'ns and Estimated Revenue.	Expended to Date.	Balances Unexpended
Amounts brought forward	$79,466 83	$65,290 90	$1,072,276 66	$1,126,567 56	$993,195 87	$134,371 69
School Houses (New and Furniture, Putnam School House, Completion)			10,454 74	10,454 74	10,454 74	
School Houses (Webster School House, Plumbing)			2,029 87	2,029 87	2,029 87	
Sewers (Construction)	16,573 52	14,000 00	8,788 67	22,788 67	22,709 88	78 79
Sewers (Construction) "Bath Street"	30 00		†13,964 30	†13,964 30	13,857 95	106 35
Sewers (Construction) "Front Street"			5,000 00	5,000 00	535 84	4,464 16
Sewers (Maintenance)	1,904 80	1,700 00	27,004 80	28,704 80	28,385 63	319 17
Shade Trees and Public Grounds	108 58		4,630 60	4,630 60	4,630 60	
Sinking Funds			51,145 00	51,145 00	51,145 00	
State Aid	10,979 50	11,000 00	2,500 00	13,500 00	11,811 90	1,688 10
Stationery and Printing			4,000 00	4,000 00	3,990 86	9 14
Street Department (Extension Charles River Street)			1,100 00	1,100 00	100 00	*1,000 00
Street Department (Extension DeWolfe Street)			1,800 00	1,800 00	200 00	*1,600 00
Street Department (Extension Windsor Street)			5,600 00	5,600 00	5,554 73	45 27
Street Department (Paving):—						
Main Street, from Lafayette Square to westerly side of Central Square			18,239 88	18,239 88	18,239 88	
Ordinary Paving and Repairs	6,151 37	6,000 00	9,023 33	15,023 33	14,996 00	27 33
North River Flagging Stone			1,113 26	1,113 26	1,113 26	
Street Department (Repairs):—						
Collecting Ashes and Repairs of Streets	2,061 49	2,000 00	99,054 25	101,054 25	101,054 25	
Sea Wall on Charles River at Mill Pond			4,500 00	4,500 00	3,426 60	*1,073 40
Street Department (Watering)	12,052 84	12,000 00	4,052 84	16,052 84	16,033 35	19 49
Street Department (Widening) "Front Street"	3,500 00		†53,500 00	†53,500 00	34,488 45	19,011 55
Street Department (Widening) "Inman Street"			2,600 00	2,600 00	1,150 00	*1,450 00
Street Department (Widening) "Main Street"			505 00	505 00	504 87	13
	$132,828 93	$111,990 90	$1,392,883 20	$1,504,874 10	$1,339,609 53	$165,264 57

STATEMENT showing the Appropriations, Receipts, Expenditures, etc., to December 1, 1888.—Concluded.

Water Department Accounts.	Receipts.	Estimated Revenue.	Appropriat'ns.	Appropriat'ns and Estimated Revenue.	Expended to Date.	Balances Unexpended
Water Works (Construction)........	$620 00	$620 00		$25,620 00	$24,876 84	$743 16
Water Works (Construction, Fresh Pond Land Account)........	62 65	62 65	†$16,606 70	†16,669 35	15,400 57	1,268 78
Water Works (Construction, Stony Brook Add. Water Supply)..	2,377 00	2,377 00	†76,132 32	†78,509 32	63,006 09	15,503 23
Water Works (Interest on Water Loan).........................	228 00	228 00		90,728 00	89,765 00	963 00
Water Works (Maintenance)				42,500 00	41,951 32	548 68
Water Works (Rates, Fines, etc.)....................	217,656 73	214,075 00				
Water Works (Rates, Fines, etc., Abatements)....................				4,000 00	3,842 78	157 22
Water Works (Rates, Fines, etc., Refunds)........................				2,500 00	2,002 73	497 27
Water Works (Sinking Fund)...............				49,575 00	49,575 00	
Water Works (Sinking Fund, Surplus Receipts).................		7,424 42		7,424 42	7,424 42	
Water Works (Supplies)..	6,183 32	6,183 32 }		5,983 32	5,216 31	767 01
Water Works (Supplies, Abatements)..........................				200 00	33 65	166 35
	$227,127 70	$230,970 39	$92,739 02	$323,709 41	$303,094 71	$20,614 70

†These Appropriations were provided for by Loans.

CITY TREASURY.

Dr.

To Cash in Treasury December 1, 1887	$125,068 68	
Receipts as shown in the foregoing Statement (City Department Accounts)	132,828 93	
Receipts as shown in the foregoing Statement (Water Department Accounts)	227,127 70	
Amount received from Collector of Taxes for 1888	909,639 50	
Amount received from Collector of Taxes for 1887	71,272 80	
Amount received from Collector of Taxes for other years	5,124 91	
Betterments	644 00	
Cemetery Fund (am'nt received for "perpetual care of lots")	2,400 00	
City Lands	7,228 80	
Loan, City Hall Land	83,000 00	
Loan, Harvard Bridge	200,000 00	
Loan, Temporary	400,000 00	
Loan, Water	73,000 00	
Notes Receivable	1,303 94	
Tax Lien Account	166 76	
Tax (Corporation)	51,289 26	
Tax (National Bank)	16,887 57	
Trustees of Sinking Fund of Water Works	175,000 00	
		$2,481,982 85

CITY TREASURY.

Cr.

By Amount expended as shown in the foregoing Statement (City Department Accounts)	$1,339,609 53		
Amount expended as shown in the foregoing statement (Water Department Acct's)	303,094 71		
Cemetery Fund	2,400 00		
Loan, Temporary	400,000 00		
Loan, Water	175,000 00		
Tax (County)	39,342 40		
Tax Lien Account	518 08		
Tax (National Bank)	5,804 11		
Tax (State)	70,110 00		
		2,335,878 83	
Balance in Treasury, as per Auditor's Account			$146,104 02
From which should be deducted Balance unexpended from sale of Bonds:			
Bridge Loan	$61,770 62	78,548 98	
Sewer Loan	106 35		
Fresh Pond Loan	1,268 78		
Stony Brook Loan	15,403 23		
*Balance unexpended, on account of Contracts begun but not completed		22,319 66	
			100,868 64
Net Balance in Treasury as per Auditor's Account			$45,235 38
Add Balance unexpended from sale of Bonds			78,548 98
Add Balance unexpended on account of Contracts			22,319 66
Add unpaid bills of November draft to be paid in December, 1888			33,838 96
Balance in Treasury, as per Treasurer's Account, November 30, 1888			$179,942 98

APPROPRIATIONS AND EXPENDITURES.

The Amount of the Several Appropriations Made by the City Council During the Year — The Transfers from One Appropriation to Another — The Amount Received into the City Treasury from All Sources — The Expenditures in Detail under Each Appropriation, and the Unexpended Balances, Nov. 30, 1888.

Abatements, Taxes.

Appropriation		$15,500 00
Transfers from Discounts, Taxes	$1,633 47	6,167 20
Interest	4,533 73	
		$21,677 20

EXPENDED.

For abatement of taxes, as per item No. 1 of expenses	$21,667 20

Betterments.

RECEIVED.

For assessments on Washington Avenue, as per item No. 1 of receipts	$644 00

Bridge, Harvard.

(Cambridge, one-half.)

Appropriation	$100,000 00
Amount of 1887 appropriation unexpended Nov. 30, 1887	97,104 82
Revenue, appropriated	7,395 00
	$204,499 82

RECEIVED.

For premium on bonds, as per item No. 2 of receipts	$7,395 00	

EXPENDED.

For Advertising	$224 18	
Carriage Hire	1 50	
Contracts: —		
D. H. Andrews (Iron Superstructure)	50,794 89	
Amounts carried forward	$51,020 57	$204,499 82

Amounts brought forward . .	$51,020 57	$204,499 82
For Contracts :—		
Wm. G. Barker (Kyanized Spruce Plank)	6,049 34	
Boynton Bros. (Draw Foundation and Pier)	2,994 55	
Shields & Carroll (Masonry Piers)	46,896 23	
Wm. H. Ward (Masonry Abutments)	7,561 89	
Moving Building	29 73	
Moving Lumber	31 62	
Office Furniture	24 22	
Paving (Experimental) . . .	75 38	
Photographic Work	23 00	
Postage and Stationery . . .	59 53	
Printing	69 87	
Rent of land	60 00	
Rent of Telephone	42 50	
Row-boat	42 12	
Salaries (one-half) :—		
Wm. Jackson, Engineer . .	1,000 02	
Walter H. French, Secretary	750 00	
John E. Cheney, Ass't Eng'r	600 00	
N. S. Brock, Ass't Engineer	760 50	
Henry Manley, Ass't Eng'r	24 50	
E. R. Garvin, Inspector . .	738 50	
Chas. H. Marple, Inspector .	356 00	
A. Lincoln, Inspector . . .	366 00	
John Dinand, Inspector . .	294 75	
Geo. E. Currier, Draughtsman	52 00	
E. G. Thayer, Draughtsman	1 88	
Frank L. Locke, Draughtsman	34 12	
S. E. Tinkham, Draughtsman	70 50	
M. G. Woodward, Leveler .	438 75	
F. L. Libbey, Leveler . . .	20 25	
M. P. M. Almeida, Rodman .	24 50	
F. A. Bayley, Transitman .	97 50	
Amounts carried forward	$120,610 32	$204,499 82

Amounts brought forward . .	$120,610 32	$204,499 82
For Salaries (one-half):—		
F. P. Spaulding, Transitman	20 00	
T. J. Condon, Aid	8 25	
E. T. Duffy, Aid	19 50	
J. F. Gorman, Aid	45 00	
W. J. Casey, Axeman . .	352 88	
Sundries	37 73	
Surveying Lumber	71 38	
Travelling expenses of Commissioners and Engineers . . .	575 69	
As per item No. 2 of expenses . .		$121,740 75
Balance unexpended . .		$82,759 07

Bridges.

Appropriation	$3,000 00

EXPENDED.

For Hardware, tools, etc.	$11 23	
Labor, as per pay-rolls . . .	2,225 84	
Lumber	215 21	
Pulling piles in canal	150 00	
Replacing buoys	175 00	
As per item No. 3 of expenses . . .		$2,777 28
Balance unexpended . . .		$222 72

Bridges, West Boston, Craigie's and Prison Point.

Appropriation	$6,300 00
Estimated revenue	400 00
Amount carried forward	$6,700 00

Amount brought forward			$6,700 00

City of Cambridge (one-half).

RECEIVED.

For rent, wharfage, etc.	$345 74		
Sheathing draw	42 07		
As per item No. 3 of receipts	$387 81		

EXPENDED.

For Displacement of tide water		$3 37	
Diving		15 00	
Electric lights		1,189 50	
Fuel		254 51	
Hardware, tools, etc.		57 77	
Labor, as per pay-rolls		2,115 18	
Lumber		402 91	
Paving		13 90	
Repairs: —			
Carpenter work	$297 99		
Drain work	11 20		
Iron work	61 14		
Painting	12 50		
Paper hanging	9 79		
Plastering	2 25		
Plumbing	18 07		
Roofing	4 57		
		417 51	
Salaries: —			
Wm. J. Marvin, Commis'ner		$500 00	
Chas. S. Parsons, Clerk		125 00	
Salt		5 56	
Signs		3 50	
Stationery and postage		4 84	
Sundries		8 40	
Teaming		28 00	
Water		27 50	
Watering roadway		419 37	
As per item No. 4 of expenses			$5,591 82
Balance unexpended			$1,108 18

Cambridge Cemetery.

Estimated revenue	$15,000 00
Transfer from Cambridge Cemetery (Receiving Tomb)	118 43
	$15,118 43

RECEIVED.

For Apples and hay	$167 25
Burial fees	2,902 21
Care of lots	3,520 04
Foundations, brick graves, etc. .	1,088 54
Interest on fund for perpetual care	575 00
Junk	1 50
Lots and graves	3,101 26
Rent of house	229 94
Sundries	1 50
Wood	31 00
As per item No. 4 of receipts . . .	$11,618 24

EXPENDED.

For Badges	$4 00	
Bricks	65 50	
Car-tickets	20 00	
Directories	4 50	
Drain pipe	10 53	
Expressage	8 45	
Fuel	53 50	
Grave covers	41 25	
Hardware, tools, etc.	305 47	
Hay and grain.	111 82	
Harness and repairs	25 40	
Horse medicine	1 20	
Horse-shoeing	33 51	
Amounts carried forward . .	$685 13	$15,118 43

Amounts brought forward		$685 13	$15,118 43
For Labor, as per pay-rolls		10,067 25	
Loam		138 00	
Lumber, lime and cement		123 10	
Manure		327 24	
Marble tablets		160 00	
Paints, oil, etc.		8 97	
Plants, seeds, shrubs and trees		601 80	
Postage		12 00	
Professional services of Ernest W. Bowditch		139 60	
Repairs: —			
Carpenter work	$80 67		
Plastering	25 00		
Sundries	50		
Wagon	36 65		
		142 82	
Salaries: —			
Chas. S. Childs, Superintendent		1,274 97	
J. Watson Taylor, Bookkeeper		915 00	
Walter W. Pike, Clerk		50 00	
J. K. Farwell, Superintendent (for May, 1887)		108 33	
Shades		8 50	
Stationery and printing		115 80	
Stone		82 17	
Sundries		5 78	
Teaming		21 00	
Telephone rent and tolls		52 10	
Use of track		5 00	
Watering street		58 00	
Water supply		1 51	
As per item No. 5 of expenses			$15,104 07
Balance unexpended			$14 36

Cambridge Cemetery (Receiving Tomb).

Appropriation		$3,000 00
Estimated revenue		1,000 00
		$4,000 00
Transferred to Cambridge Cemetery		118 43
		$3,881 57

EXPENDED.

For Contract with Augustus Lothrop	$3,579 25	
Iron work	19 97	
Labor, grading and filling	265 00	
Lumber	5 35	
Polishing stone and cutting letters	12 00	
As per item No. 6 of expenses		$3,881 57

Cambridge Public Library.

Appropriation		$2,800 00
Estimated revenue		4,500 00
Surplus revenue		17 12
		$7,317 12

RECEIVED.

For Catalogues and fines	$201 78	
Dog licenses for 1887	4,310 34	
Other revenue	5 00	
As per item No. 5 of receipts	$4,517 12	

EXPENDED.

For Binding books	$568 31	
Books, periodicals, etc.,	2,119 03	
Catalogues	110 50	
Amounts brought forward	$2,797 84	$7,317 12

Amounts brought forward		$2,797 84	$7,317 12
For Expressage, car-fares and postage		40 08	
Gas		261 22	
Ice		7 50	
Printing		103 18	
Rent		1,000 00	
Ribbon stamp		7 50	
Salaries:			
A. L. Hayward, Librarian	$800 00		
Assistants	1,701 95		
John Little, janitor	540 00		
		$3,041 95	
Stationery		23 95	
Sundries		14 40	
Watering street		2 00	
As per item No. 7 of expenses			$7,299 62
Balance unexpended			$17 50

Cambridge Public Library (Trust Fund).

Appropriation		$1,000 00

EXPENDED.

For Note of City to Trustees of Fay Fund	$1,000 00	
As per item No. 8 of expenses		$1,000 00

Cemetery Fund.

Amount of fund Nov. 30, 1887	$10,778 71

RECEIVED.

For perpetual care of lots in Cambridge Cemetery as per item No. 5 of receipts	$2,400 00
Interest accumulations	380 52
	$13,559 23

This fund is held in trust by the Committee on Finance, and consists of :—

Cash on hand	$2,400 00	
Cash in Cambridge Savings Banks	2,159 23	
Cambridge Bonds	9,000 00	
		$13,559 23

City Lands.

RECEIVED.

For cash payments on estates sold, as per item No. 9 of receipts	$7,228 80

City Hall Land.

Appropriation	$83,000 00
Estimated revenue	11,000 00
	$94,000 00

RECEIVED.

For premium on bonds issued	$1,489 85
Sale of dwelling houses	9,000 00
As per item No. 8 of receipts	$10,489 85

EXPENDED.

For Advertising		$32 28	
Auctioneer		60 00	
Estates: —			
Edmund Reardon	$15,796 50		
Susan E. Chase	25,000 00		
Theo. C. Hurd	16,000 00		
Elizabeth B. Jewell	12,000 00		
Sophia G. Durrell	24,000 00		
		$92,796 50	
For Examination of titles		50 00	
Fence		20 89	
Interest on mortgage (Durrell est.)		135 00	
Services:			
L. M. Hannum, Real Estate Ag't,		400 00	
Will F. Roaf		30 00	
As per item No. 11 of expenses			$93,524 67
Balance unexpended			$475 33

City Buildings (Care and Repairs).

Appropriation	$9,500 00
Estimated revenue	2,000 00
	$11,500 00
Transferred to School Houses (Care and Repairs)	200 00
	$11,300 00

RECEIVED.

For Old material	$5 72
Rent:—	
Armories (State)	800 00
District Court Room (County)	350 00
Office and shop (Water Works)	600 00
Tenements (firemen) . . .	200 00
Ward room (sundry persons)	25 00
As per item No. 7 of receipts . . .	$1,980 72

EXPENDED.

City Hall:—

For Brushes and mops	$9 64	
Cleaning	540 20	
Clocks and repairs	7 50	
Composition	14 00	
Electric lights	61 50	
Fuel	486 58	
Furniture, carpets, etc. . . .	127 51	
Gas	422 42	
Gas fittings	13 42	
Hardware, tools, etc.	16 21	
Heating apparatus and repairs .	46 66	
Ice	73 94	
Janitor, Chas. A. Gay . . .	1,205 18	
Lundgren lights	105 00	
Mats	12 65	
Amounts carried forward . .	$3,142 41	$11,300 00

Amounts brought forward . .		$3,142 41	$11,300 00
For Repairs:—			
Awnings	$12 50		
Carpenter work . .	76 29		
General	19 02		
Painting and glazing	113 00		
Roofing	104 75		
		325 56	
Sundries		68 42	
		$3,536 39	
Central Square Building:—			
For Fuel	$658 56		
Furniture, carpets, etc.	11 70		
Gas	263 64		
Gas fittings.	28 13		
Hardware, tools and supplies	28 51		
Heating apparatus . .	4 37		
Janitor, Geo. D. Brown	1,205 18		
Mats	42 78		
Repairs:—			
Carpenter work . .	133 36		
Drain work . . .	91 06		
Painting and glazing	34 14		
Plumbing	12 26		
Roofing	5 00		
		2,518 69	
Brattle Square Building:—			
For Clocks and repairs . .	$13 60		
Composition	28 50		
Fuel	1,085 10		
Furniture and carpets .	26 13		
Gas	569 11		
Gas fittings	20 41		
Janitor, Chas. Munroe	1,254 85		
Lighting Tower Clock	187 10		
Amounts carried forward	$3,184 80	$6,055 08	$11,300 00

Amounts brought forward	$3,184 80	$6,055 08	$11,300 00
For Repairs:—			
Carpenter work . .	50 10		
Heating apparatus .	110 01		
Painting and glazing	269 18		
Plumbing	174 79		
Roofing	34 00		
Step ladder	8 40		
Sundries	20 71		
		3,851 99	
Ward 5 Building (Engine No. 4 and Station 5):—			
For Drain	$40 00		
Furnishings	28 42		
Gas	5 77		
Heating apparatus . .	16 00		
Repairs: —			
Carpenter work . .	52 24		
Painting and glazing	187 00		
Plastering	4 50		
Plumbing	102 43		
Roofing	22 10		
Water supply . . .	35 66		
		494 12	
Hook and Ladder (No. 2) Building, Portland St.:—			
Repairs: —			
Carpenter work . .	$56 24		
Heating apparatus .	4 20		
Iron work	30 21		
Mason work . . .	29 73		
		120 38	
Engine (No. 5) Building, Inman Square:—			
For Building fence . . .	$80 00		
Repairs: —			
Carpenter work . .	29 00		
Painting and glazing	14 50		
Plumbing	2 04		
		125 54	
Amounts carried forward . .		$10,647 11	$11,300 00

Amounts brought forward		$10,647 11	$11,300 00
Ward Three Building (Third St.), Engine 3 and Station 3:—			
For Furniture, etc.	$27 90		
Gas	39 93		
Repairs:—			
Carpenter work	47 94		
Heating apparatus	27 79		
Painting and glazing	95 50		
Plumbing	223 50		
Roofing	6 94		
Whitewashing	14 50		
Sundry supplies	6 61		
		$490 61	
Engine (No. 2) Building, Main St.:—			
Repairs:—			
Heating apparatus	$20 27		
Mason work	7 02		
Painting and glazing	69 25		
Plumbing	7 59		
		$104 13	
As per item No 10 of expenses			$11,241 85
Balance unexpended			$58 15

Discounts, Taxes.

Appropriation	$27,000 00
Transferred to abatements (taxes)	1,633 47
	$25,366 53

EXPENDED.

For discount on taxes of 1888 paid on or before Oct 10, 1888, as per item No. 12 of expenses	$25,366 53

Engineering.

Appropriation	$7,600 00
Estimated Revenue	1,000 00
Surplus revenue	10 00
Transferred from sewers, construction	57 20
	$8,667 20

RECEIVED.

For Services of City Engineer and Assistant (Cambridge Water Works)	$1,000 00
Other revenue	10 00
As per item No. 10 of receipts	$1,010 00

EXPENDED.

For Binding plans	$17 50	
Car fares	2 75	
Carriage hire	5 00	
Drawing materials	31 91	
Hardware, tools and supplies	76 05	
Inspection of bridge	5 00	
Maps and mouldings	42 90	
Printing	13 10	
Salaries :—		
Wm. S. Barbour, City Eng.,	$3,000 00	
Assistant engineers	5,458 70	
Sundries	14 29	
As per item No. 13 of expenses		$8,667 20

Fire Department.

Appropriation		52,400 00
Estimated revenue		600 00
Surplus revenue		591 73
Transferred from Sewers (Construction)		444 63
		$54,036 36
Transferred to Fire Dept. New Building		35 77
		$54,000 59

RECEIVED.

For sale of horse	$150 00	
Manure	75 00	
Old material	241 73	
Building (Hook and Ladder No. 2)	725 00	
As per Item No. 11 of receipts	$1,191 73	

EXPENDED.

For Apparatus and repairs	$2,493 76	
Bedding and furniture	493 63	
Brooms and brushes	44 96	
Building coal station	692 70	
Carriage hire for committee	6 00	
Cleaning materials (cotton waste)	29 07	
Damage by F. A. Telegraph	39 16	
Expressage and freight	60 60	
Fines, remitted	47 50	
Fire hats and badges	34 00	
Fuel	1,331 21	
Gas	851 08	
Hardware and tools	121 57	
Harnesses and repairs	224 12	
Hay, grain and straw	2,478 62	
Horses	600 00	
Horse hire	469 50	
Am'ts carried forward,	$10,017 48	$54,000 59

Amounts brought forward . . .		$10,017 48	$54,000 59
For Horse-shoeing		504 59	
Hose and repairs		588 14	
Hydrants, care of		77 55	
Paving driveway		353 47	
Printing and stationery . . .		41 83	
Rent of land		40 00	
Rent of shed		38 50	
Repairs of buildings, etc. . .		322 72	
Ringing bells		34 50	
Salaries :—			
Chief engineer		$1,500 00	
Ass't engineers		1,125 00	
Clerk		25 00	
Engineers, drivers, firemen, etc.		36,146 64	
Signal boxes		500 00	
Substitutes, vacation and sickness		979 25	
Supplies for chemical engine	$178 50		
Supplies for F. A. Telegraph	970 20		
Supplies, sundries . .	159 11		
		1,307 81	
Veterinary surgeon and medicines		73 00	
Washing, bed-clothes, etc. . .		325 11	
As per item No. 14 of expenses . .			$54,000 59

Fire Department, New Building for Hook and Ladder Truck No. 2.

Appropriation			$7,100 00
Transferred from Fire Department			35 77
			$7,135 77

EXPENDED.

For Contract, H. Coon & Co. (balance)		$5,541 00	
Extra Labor :—			
Mason work	$20 00		
Carpenter work	129 82		
Concreting cellar	192 00		
Connecting meter	8 39		
Grading.	180 00		
Lining doors	36 10		
Plumbing	38 59		
Sewer	6 95		
		611 85	
Gas fixtures		95 00	
Steam-heating apparatus		882 00	
Straw		5 92	
As per item No. 15 of expenses			$7,135 77

Health Department.

Appropriation		$3,500 00

EXPENDED.

For Advertising	$9 91	
Burying animals	50 25	
Car tickets	40 00	
Cow-pox points	27 63	
Disinfectants	37 60	
Expenses of Health officer to Milwaukee	55 00	
Expenses, Investigation of East Somerville nuisance	8 11	
Printing	88 40	
Amounts carried forward	$316 90	$3,500 00

Amounts brought forward . .	$316 90	$3,500 00
For Salaries:—		
Dr. A. F. Holt, health officer	$1,500 00	
C. S. Lincoln, sanitary insp'r	900 00	
John McDuffie, clerk . . .	200 00	
Sewage samples . .	15 62	
Stationery, postage, etc. . . .	78 84	
As per item No. 16 of expenses . .		$3,011 36
Balance unexpended		$488 64

Incidental Expenses.

Appropriation		$33,500 00
Estimated revenue		3,500 00
Surplus revenue		858 50
Transferred from Sewers, Construction		1,411 78
		$39,270 28
Transferred to School House (New and Furniture, Peabody) . . .	2,500 00	
Transferred to Sewers, Maintenance	4,000 00	
		$6,500 00
		$32,770 28

RECEIVED.

For Conscience money	$75 00	
Costs in suit of Waldo E. Perkins	66 71	
County fee for appraisal of damage done by a dog	1 00	
Fees received by city officials:—		
City Clerk	$1,735 89	
Collector of Taxes	1,484 69	
Sealer of Weights and Measures	360 75	
Weighers (one-half) . . .	161 96	
Impounding cows	1 50	
Amounts carried forward . .	$3,887 50	$32,770 28

Amounts brought forward		$3,887 50	$32,770 28
For Licenses: —			
Grease	$31 00		
Liquor	44 00		
Milk and butterine	165 00		
Peddlers	75 00		
		315 00	
Printing (Harvard Bridge Loan) Bonds		135 00	
Rent of land on Walden Street		5 00	
Sale of old material		16 00	
As per item No. 12 of receipts		$4,358 50	

EXPENDED.

For Ambulance	$498 50	
Assessors' department:—		
Ass't Assessors	$1,032 00	
Abstracting deeds	270 80	
Carriage hire	19 50	
Clerical assistance	1,697 50	
Auditor's department:—		
Clerical assistance	471 00	
Bath house expenses:—		
Contract for building	$1,950 00	
Clock	4 00	
Extra labor	182 10	
Mooring	181 55	
Services of Frederick Clover	102 50	
Sundry supplies	12 48	
Care of clock	170 00	
Care of fires in Ward Three Building	40 00	
Care of horse and carriage, Supt. of Buildings	385 27	
Changing gas-pipe	9 30	
Amounts carried forward	$7,026 50	$32,770 28

Amounts brought forward . .	$7,026 50	$32,770 28
For City Clerk's dep't:—		
Binding Public Statutes . .	$1 50	
Census of births	265 50	
Clerical assistance	399 10	
Copying records of Town and City of Cambridge from 1704	189 35	
Returns of births and deaths	129 75	
Serving warrants, posting notices, etc.	141 99	
City Council:—		
Carriage hire	111 00	
Car tickets	495 00	
Page	50 00	
Refreshments	48 00	
Clerk of Committees:—		
Clerical assistance	785 00	
City pound	50 00	
City scales, care and repairs .	42 61	
Commissioners Sinking Fund:—		
Clerk, John McDuffie . . .	25 00	
Rent of box, Safe Deposit and Trust Co.	70 00	
Commissions, sale of land . .	171 86	
Copying declarations	44 30	
Court expenses	77 70	
Damages awarded to:—		
Charles F. Dunbar	15 00	
John F. Elkins	30 00	
Decoration Day, G. A. R. . .	1,000 00	
Deeds, abstracting and recording	66 81	
Directories	47 50	
Election expenses:—		
Care of ward rooms . . .	303 55	
Carting ballot-boxes . . .	68 00	
Posting voting lists, warrants and notices	111 00	
Precinct officers	946 00	
Amounts carried forward . .	$12,712 02	$32,770 28

Amounts brought forward . .	$12,712 02	$32,770 28
For Election expenses, registrars of voters:—		
Advertising and printing . .	72 75	
Clerical assistance	156 80	
Directory	2 50	
Salaries	1,700 00	
Stationery and supplies . .	52 18	
Refreshments at recounts . .	36 00	
Rent of halls for caucus . .	440 00	
Repairs of ballot-boxes . . .	6 40	
Ringing bells on election days	20 00	
Seal	15 00	
Signboards	11 50	
Voting lists.	624 61	
Engraving Bonds	152 00	
Examination of Titles . . .	260 00	
Executions against the city:—		
Wm. J. Brogan	1,177 55	
Almira H. Clark	500 00	
Elizabeth Fulton	2,107 10	
Patrick Kinneen	150 00	
Mary Lindh	1,500 25	
Margaret Murphy	300 25	
Expenses in defence of suits on "Knibbs" patent	280 24	
Expressage	53 07	
Fountain at Washington Elm	9 70	
High School Exhibition . . .	50 00	
History of Middlesex County .	10 00	
Liquor licenses (one fourth to State)	11 00	
Massachusetts Reports . . .	3 25	
Messenger's assistant	261 67	
Milk and Vinegar Inspector:—		
Analysis	10 00	
Chemicals	5 00	
Samples	55 56	
Salary of C. S. Lincoln, Deputy	200 00	
Amounts carried forward . .	$22,946 40	$32,770 28

Amounts brought forward		$22,946 40	$32,770 28
For Mill Pond (filling)		2,033 13	
Newspapers		29 75	
Railroad guide		1 50	
Rent of P. O. Box		4 00	
Rifle Range		835 90	
Ringing bells on holidays		63 00	
Sealer of Weights and Measures:—			
Carriage hire	66 00		
Sundry expenses	123 75		
		189 75	
Shovelling snow from city property		111 66	
Soundings for public buildings		8 00	
Stamps and repairs		13 60	
Sundry supplies and repairs		79 77	
Tax on almshouse lands in Somerville		397 60	
Telegrams and telephone tolls		9 83	
Treasurer and collectors' department:—			
Carriage hire		340 00	
Clerical assistance		4,126 39	
Commissions, collecting poll-taxes,		979 00	
Copying press		10 00	
Counterfeit detector		3 00	
Distributing tax notices		141 49	
Distributing water notices		70 75	
Invalid tax titles		62 63	
Money bag		5 50	
Postal cards		115 00	
Signs		13 69	
Typewriting copies		57 31	
Weighing coal		121 63	
As per item No. 17 of expenses			$32,770 28

Interest.

Appropriation	$110,000 00
Estimated revenue	2,000 00
Surplus revenue	5,590 98
	$117,590 98
Transferred to Abatements (Taxes)	4,533 73
	$113,057 25

RECEIVED.

For Accrued interest on loans	$1,562 22
Deposits in bank	1,260 79
Mortgage notes	161 21
Prepayments to Trustees of Sinking Fund of Water Works	2,666 67
Taxes	1,940 09
As per item, No. 13, of receipts	$7,590 98

EXPENDED.

For interest on : —

Cemetery fund	$575 00	
Daniel White Charity	300 00	
Dowse Institute Fund	600 00	
Fay Fund	40 33	
Funded Loan, coupons	75,595 00	
Funded Loan, registered	11,775 00	
Note to Trustees of Sinking Fund of Water Works	8,000 00	
Sanders Temperance Fund	600 00	
Temporary Loan	9,497 36	
As per item No. 18 of expenses		$106,982 69
Balance unexpended		$6,074 56

Lighting Streets.

Appropriation		$44,000 00
Estimated revenue		250 00
		$44,250 00

RECEIVED.

For Damage to lamps	$17 50	
Lighting ladder	2 50	
New lamp and setting same	83 19	
Old material	10 00	
	$113 19	

EXPENDED.

For Carriage hire for committee	$28 00	
Carriage hire for superintendent	170 00	
Changing lamps	13 00	
Chimneys, burners and wicks	208 32	
Cleaning carpet	2 98	
Copying press	7 23	
Electric lighting	16,460 61	
Expressage	1 50	
Founts	19 58	
Gas lighting	14,298 42	
Gas fittings	11 65	
Gas torches	15 00	
Granite circle	24 11	
Hardware, tools and repairs	41 89	
Lamp-lighters as per pay-rolls	7,881 77	
Ladders and repairs	23 10	
Matches	13 30	
Oil	366 50	
Paint, putty, glass, etc.	352 73	
Posts and lanterns	96 00	
Printing	13 25	
Repairs on lamps	554 88	
Salary of Superintendent B. Otis Danforth	650 00	
Setting posts	132 34	
As per item No. 19 of expenses		$41,386 16
Balance unexpended		$2,863 84

Loan (Harvard Bridge).

RECEIVED.

For Coupon Bonds dated July 2, 1888	$100,000 00	
Coupon Bonds dated September 1st, 1888	100,000 00	
Payable in thirty years with interest at four per cent per annum, as per item No. 15 of receipts		$200,000 00

Loan (City Hall Land).

For Coupon Bonds dated August 1, 1888, payable in ten years at an annual interest of four per cent per annum, as per item No. 16 of receipts	$83,000 00

Loan (Temporary).

RECEIVED.

For City Notes issued during the year, as per item No. 17 of receipts	$400,000 00

EXPENDED.

For Matured City Notes paid during the year, as per item No. 20 of expenses	$400,000 00

Loan (Water).

RECEIVED.

For Sale of Bonds, as per item No. 18 of receipts	$73,000 00

EXPENDED.

For Matured Bonds, as per item No. 21 of expenses	$175,000 00

Notes Receivable.

RECEIVED.

On account of mortgage notes held by the city as per item No. 19 of receipts		$1,303 94

Pauper Department.

Appropriation		$21,500 00
Estimated Revenue		4,000 00
Transferred from		
Pauper Department, Almshouse	$2,100 00	
Pauper Department, House Offal	300 00	
Sewers, construction	1,383 35	
		$3,783 35
		$29,283 35

RECEIVED.

For Aid to, board and burial of paupers, as per item No. 20, of receipts	$3,952 42	

EXPENDED.

For Aid to, board and care of paupers by towns, cities, and individuals	$4,374 39	
Advertising	10 40	
Binding directories	4 00	
Boots and shoes	1,014 20	
Burial of paupers	213 30	
Care of feeble-minded at Mass. School for Feeble-minded	525 44	
Care of sick at Carney Hospital	212 01	
Care of sick at Children's Hospital	24 00	
Care of insane at Danvers Lunatic Hospital	3,832 27	
Care of insane at Northampton Lunatic Hospital	169 93	
Care of insane at Taunton Lunatic Hospital	344 48	
Amounts carried forward	$10,724 42	$29,283 35

Amounts brought forward . .	$10,724 42	$29,283 35
For Care of insane at Westborough Insane Hospital	1,991 70	
Care of insane at Worcester Insane Asylum	2,522 42	
Care of insane at Worcester Lunatic Asylum	4,533 85	
Care of insane, by Com. of Mass.	1,818 74	
Care of paupers, by Com. of Mass.	64 00	
Care of paupers, by County of Middlesex, at House of Correction	61 86	
Carriage-hire	6 00	
Car-tickets	160 00	
Cleaning carpets	2 35	
Clothing	94 07	
Directories	7 50	
Flour-bags, etc.	29 91	
Fuel	1,763 39	
Gas	91 44	
Groceries and provisions . . .	1,493 55	
Horse	250 00	
Ice	7 50	
Medical attendance.	32 00	
Medicine case	43 28	
Medicine	248 97	
Nurse	15 02	
Postage	54 98	
Salaries: —		
D. P. Muzzey, secretary . .	$1,400 00	
V. P. Danforth, visitor . . .	1,500 00	
Stationery and printing . . .	122 34	
Sundries	6 29	
Surgical instruments . . .	7 40	
Telephone, rent and tolls . .	107 25	
Travelling expenses of visitor .	116 19	
Truss	4 00	
Washing	2 93	
As per item No. 22 of expenses .		$29,283 35

Pauper Department (Almshouse).

Appropriation	$16,500 00
Estimated revenue.	6,500 00
Surplus revenue	4,394 56
Transferred from sewers, construction	846 23
	$28,240 79
Transferred to Pauper Department	2,100 00
	$26,140 79

RECEIVED.

For Aid to, burial and board of paupers	$557 28
Barrels	35 33
Farm produce	2,846 52
Grease and bones	47 95
Proceeds of chair-shop	614 94
Rags and old metal	33 25
Stone	6,662 20
Sundries	15 01
Weighing fees	82 08
	$10,894 56

EXPENDED.

For Advertising	$9 38	
Barge, use of	7 00	
Boots and shoes	290 14	
Building, laundry	60 00	
Burials	49 50	
Amounts carried forward	$416 02	$26,140 79

Amounts brought forward	416 02	$26,140 79
For Cake and confectionery	30 87	
Car-fares	17 15	
Carting stone	41 21	
Cash to boys for overwork	15 23	
Cash to inmates	72 90	
Chaplain	100 00	
Christmas presents	10 74	
Clothing, dry goods, etc.	1,121 05	
Cows	147 00	
Crockery ware	10 08	
Disinfectants	31 50	
Expressage	41 60	
Fireworks	9 37	
Fish	508 97	
Fuel	2,021 24	
Furniture, carpets and bedding	110 70	
Gas	249 33	
Groceries and provisions	5,962 25	
Hardware, tools and repairs	421 08	
Harness and repairs	22 00	
Hay and grain	332 27	
Insect powder	4 00	
Kitchen furnishings	190 21	
Labor, as per pay-rolls: —		
Farm	726 90	
Ledge	3,826 05	
Extra	232 80	
House officials	3,695 19	
Lumber, lime and cement	751 55	
Manure	331 79	
Medicines and drugs	146 00	
Milk	131 75	
Newspapers and periodicals	19 75	
Nurse	67 71	
Oil	18 48	
Organist	150 00	
Pigs	107 50	
Amounts carried forward	$22,092 24	$26,140 79

Amounts brought forward	$22,092 24	$26,140 79
For Plants and seeds	108 89	
Powder	199 43	
Rattan and cane	330 06	
Removing gravel from ledge	300 00	
Rent of market stand	40 00	
Repairs:—		
Mason work	$201 47	
Painting and glazing	21 68	
Paper hanging	5 25	
Plumbing	136 46	
Roofing	37 00	
Sundry	6 50	
Wagon	30 30	
Rope	12 41	
Rubber goods	11 75	
School supplies	46 25	
School teacher	425 48	
Sewer pipe	109 35	
Shoe findings	72 99	
Soap	198 86	
Spectacles and repairs	10 45	
Stabling horse	4 50	
Stationery and postage	48 80	
Steam and gas fittings	54 70	
Stone	23 64	
Sundries	29 62	
Surgical instruments	31 20	
Tank and tube	32 00	
Telephone expenses	53 30	
Warden, M. L. Eldridge	1,337 50	
Watering pots	9 25	
Water supply	10 96	
Window sashes	95 00	
Wooden ware	13 50	
As per item No. 23 of expenses		$26,140 79

Pauper Department (Almshouse, New Buildings).

Appropriation			$5,500 00

EXPENDED.

For Blackboards		$5 40	
Connecting meter		9 25	
Contract:—			
M. N. Stearns	$4,885 00		
Extra work	64 13		
		4,949 13	
Drain		75 02	
Lumber		29 60	
Mantel		15 00	
Painting		34 65	
Radiators		15 00	
Shades		22 00	
Steam and gas fittings		333 26	
As per item No. 24 of expenses			5,488 31
Balance unexpended			$11 69

Pauper Department (House Offal).

Appropriation		$11,500 00
Estimated revenue		6,000 00
Surplus revenue		721 50
		$18,221 50
Transferred to Pauper Department		300 00
		$17,921 50

RECEIVED.

For House Offal, as per item No. 22 of receipts	$6,721 50	
Amount carried forward		$17,921 50

Amount brought forward		$17,921 50

EXPENDED.

For Brooms	6 00	
Disinfectants	29 68	
Hardware tools and repairs	125 34	
Harness and repairs	169 20	
Hay, grain and straw	1,927 37	
Horse-hire	29 00	
Horses	950 00	
Horse-shoeing	287 36	
Labor, as per pay-rolls	13,753 80	
Repairing damage done by run-away horse	4 00	
Veterinary surgeon and medicines	87 00	
Wagon repairs	244 75	
As per item No. 25 of expenses		17,613 50
Balance unexpended		$308 00

Police Department.

Appropriation	$82,000 00
Estimated revenue	6,000 00
	$88,000 00

RECEIVED.

For Cloth for uniforms	$214 41	
Court fees and fines	5,533 33	
Fire works licenses	88 00	
Harness	5 00	
Horse	85 00	
Money refunded	21 25	
Transportation of prisoners	16 00	
As per item No. 23 of receipts	$5,962 99	
Amount carried forward		$88,000 00

Amount brought forward		$88,000 00
EXPENDED.		
For Badges	$7 85	
Bedding	10 50	
Belts	8 75	
Billies and straps	38 82	
Buttons	25 00	
Care of horses and wagons	708 57	
Carriage-hire	15 50	
Cleaning stations	151 11	
Cloth for uniforms	341 85	
Directories	12 50	
Disinfectants	18 25	
Food for prisoners	82 95	
Gas	546 58	
Hardware, tools and repairs	8 88	
Harness and repairs	65 70	
Horses	320 00	
Ice	28 00	
Lanterns	15 25	
Medical attendance and medicines	16 55	
Office furniture and repairs	14 08	
Photographs	25 65	
Printing	36 62	
Regalia	128 25	
Repairing padded cell	17 00	
Salaries:—		
Chief	$1,700 00	
Captains	3,744 00	
Patrolmen	77,275 75	
Matrons	611 44	
Sleigh	57 00	
Stationery	16 75	
Sundry supplies	47 84	
Telegrams	4 33	
Telephone rent and tolls	111 40	
Travelling expenses	75 53	
Washing	20 00	
As per item No. 26 of expenses		$86,308 25
Balance unexpended		$1,691 75

Salaries.

Appropriation		$26,800 00
Transferred from Sewers, Construction		141 66
		$26,941 66

EXPENDED.

For Salaries:—		
Wm. E. Russell, Mayor	$2,500 00	
Wm. W. Dallinger, City Treasurer	3,000 00	
Wm. W. Dallinger, Treasurer of Sinking Funds	300 00	
Walter W. Pike, City Clerk	2,800 00	
Edward J. Brandon, Assistant City Clerk	1,000 00	
Edward N. Manning, Clerk of Common Council	300 00	
Harry T. Upham, Auditor	1,800 00	
Joshua G. Gooch, Assessor	1,500 00	
Joseph Whittemore, Assessor	1,500 00	
Andrew J. Green, Assessor	1,500 00	
Chas. J. McIntire, City Solicitor	2,000 00	
John McDuffie, Clerk of Committees	2,000 00	
Francis L. Pratt, City Messenger	1,725 00	
B. Otis Danforth, Sealer of Weights and Measures	350 00	
Frank A. Dunbar, Milk Inspector	425 00	
Frank A. Dunbar, Vinegar Inspector	175 00	
L. L. Bryant, Assistant City Physician	1,250 00	
Benj. H. Steele, Superintendent of Buildings	1,750 00	
Fred. W. Hagar, Probation Officer	966 66	
Wm. J. Marvin, Harbor Master	100 00	
As per item No. 27 of expenses		$26,941 66

School Department (Drawing Schools).

Appropriation		$1,425 00

EXPENDED.

For Teachers, salaries	$1,347 00	
Care of rooms	50 00	
Sundries	6 07	
As per item No. 28 of expenses		$1,403 07
Balance unexpended		$21 93

School Department (Evening Schools).

Appropriation	$1,350 00
Transferred to School-Houses, Care and Repairs	400 00
	$950 00

EXPENDED.

For Teachers, salaries:—		
Ward 3	$406 00	
Ward 4	313 50	
Care of rooms	127 00	
Sundries	2 00	
As per item No. 29 of expenses		$848 50
Balance unexpended		$101 50

School Department (Incidental Expenses).

Appropriation		$700 00

EXPENDED.

For Advertising and printing	$125 15	
Car tickets	95 00	
Collecting statistics	6 00	
Expenses of High school exhibition	17 65	
Tabular review	6 15	
Telegrams	2 33	
Travelling expenses of Superintendent and others	27 03	
Salaries:—		
Wm. W. Wellington, Secretary	300 00	
Arthur W. Chamberlin, Page	25 00	
As per item No. 30 of expenses		$604 31
Balance unexpended		$95 69

School Department (Industrial School).

Appropriation		$500 00

EXPENDED.

For Care of rooms	$20 00	
Hardware, tools and repairs	25 92	
Lumber	50 67	
Salary of M. C. Beedle, Instructor	315 00	
As per item No. 31 of expenses		$411 59
Balance unexpended		$88 41

School-Department (Salaries).

Appropriation		$175,000 00
Estimated revenue		800 00
Surplus revenue		233 11
		$176,033 11
RECEIVED.		
For Hopkins Fund income . . .	$914 21	
Tuition of non-resident pupils .	119 00	
As per item No. 24 of receipts . .	$1,033 21	
EXPENDED.		
For Salaries:—		
Drawing teacher	$595 00	
Music teacher	1,700 00	
Purchasing agent	1,500 00	
Superintendent	2,990 00	
Teachers	166,288 80	
Truant officers	2,700 00	
As per item No. 32 of expenses . .		$175,773 80
Balance unexpended . .		$259 31

School-Department (Text Books and Supplies).

Appropriation		$11,000 00
Estimated revenue		300 00
		$11,300 00
RECEIVED.		
For Sale of and damage to books .	$202 86	
School supplies for almshouse .	46 25	
As per item No. 25 of receipts . .	$249 11	
EXPENDED.		
For Apparatus and supplies . . .	$275 44	
Book covers	301 56	
Amounts carried forward . .	$577 00	$11,300 00

Amounts brought forward	577 00	$11,300 00
For Book protectors	36 50	
Binding books	139 80	
Car tickets	20 00	
Cyclostyle and supplies	20 50	
Diplomas	114 01	
Directories	7 50	
Drawing materials	64 71	
Expressage	160 24	
Hand-stamp	3 55	
Ink	77 97	
Ink-wells	50 40	
Maps, charts and globes	179 89	
Moving furniture	21 00	
Paper	1,856 00	
Pens, pencils and crayons	463 55	
Printing	279 10	
Revised Statutes	6 50	
Shades and fixtures	20 63	
Slates	126 75	
Stationery	177 72	
Sundries	11 15	
Text books	6,469 62	
Tuning pianos	14 00	
Weights and measures	38 77	
As per item No. 33 of expenses		$10,936 86
Balance unexpended		$363 14

School-Houses (Care and Repairs).

Appropriation		$35,000 00
Transferred from City Buildings (Care and Repairs)	$200 00	
School Department, Evening Schools	400 00	
School-houses, Webster Plumbing	470 13	
School-houses, Putnam, Completion	145 26	
		1,215 39
Amount carried forward		$36,215 39

Amount brought forward		$36,215 39

EXPENDED.

For Blackboards	$135 32	
Brushes, dusters, etc.	305 73	
Clocks and repairs	75 00	
Conductors	42 00	
Disinfectants	17 32	
Electric bells, etc.	67 55	
Extra labor of Janitors	13 30	
Fuel	11,105 70	
Furniture and repairs	1,269 73	
Gas	540 76	
Gas fittings and fixtures	35 44	
Grading	12 25	
Hardware, tools and repairs	90 83	
Janitors, salaries as per pay-rolls	12,806 48	
Lumber, lime and cement	11 06	
Mats and carpets	179 65	
Moving furniture and expressage	34 25	
Removing night soil	148 00	
Repairs of school-houses:—		
Carpenter work	2,196 34	
Drain work	143 80	
Heating apparatus	2,188 02	
Mason work	173 53	
Painting and glazing	3,122 29	
Plumbing	244 32	
Roofing	480 42	
Sundry	14 40	
Shades and fixtures	126 93	
Sundry supplies	49 81	
Ventilation	227 50	
Wiring for electric lights	206 00	
As per item No. 34 of expenses		36,063 73
Balance unexpended		$151 66

School-House (Land for High School House).

Appropriation		$20,100 00

EXPENDED.

For Examination of titles, as per item No. 35 of expenses		100 00
Balance unexpended		$20,000 00

School-Houses (Land for Peabody School-House).

Appropriation		$6,825 00

EXPENDED.

For Examination of title	$125 00	
Land on Linnæan and Avon Sts.	6,700 00	
As per item No. 36 of expenses		$6,825 00

School-Houses (New and Furniture, Peabody School-House).

Appropriation		$20,000 00
Transferred from Incidental Expenses		2,500 00
		$22,500 00

EXPENDED.

For Building:—		
Contract with Lord Bros., builders	$5,000 00	
Contract with architect, James Fogerty	300 00	
Lumber	3 74	
As per item No. 37 of expenses		$5,303 74
Balance unexpended		$17,196 26

School-Houses, New and Furniture (Putnam School-House Completion).

Appropriation		$10,600 00
Transferred to School-houses (Care and Repairs)		145 26
Amount carried forward		$10,454 74

Amount brought forward		$10,454 74

EXPENDED.

For Blackboards	$78 00	
Carpenter work	43 00	
Clocks	13 50	
Contract for building, D. Sullivan & Son	8,463 00	
Extra labor, ...	475 00	
Electric bells, etc.	43 27	
Furniture, shades, mats, etc. .	630 46	
Gas and water supply	13 22	
Hardware	46 43	
Heating apparatus	518 00	
Lumber	38 96	
Painting	3 50	
Platforms	88 40	
As per item No. 38 of expenses . .		$10,454 74

School-Houses (Webster School-House Plumbing).

Appropriation	$2,500 00
Transferred to School-houses, (Care and Repairs)	470 13
	$2,029 87

EXPENDED.

For Contract with John K. James .	$1,960 00	
Extra labor	20 87	
Plans and specifications . . .	49 00	
As per item No. 39 of expenses . .		$2,029 87

Sewers (Construction).

Appropriation		$12,000 00
Estimated revenue		14,000 00
Surplus revenue		2,573 52
		$28,573 52
Transferred to Engineering	$57 20	
Fire Department	444 63	
Incidental Expenses	1,411 78	
Pauper Department	1,383 35	
Pauper Department, Almshouse	846 23	
Salaries	141 66	
Sewers, Maintenance	1,500 00	
		$5,784 85
		$22,788 67

RECEIVED.

For Assessments	$16,091 18
Building catch-basins	83 13
Building sewer at Roberts Dam, Stony Brook	399 21
	$16,573 52

EXPENDED.

For Advertising	$1 50	
Bricks	1,759 95	
Carriage hire	5 00	
Castings	931 13	
Cement	291 65	
Granite	16 80	
Hardware, tools and repairs	528 53	
Labor, as per pay-rolls	11,400 51	
Extra	31 50	
Lumber	342 77	
Oil	23 12	
Oat meal	6 55	
Amounts carried forward	$15,339 01	$22,788 67

Amounts brought forward . .	$15,339 01	$22,788 67
For Packing	12 00	
Pile driving	215 26	
Pipe	5,558 00	
Rubber goods	55 75	
Sand and gravel	95 50	
Stone for catch-basins . . .	314 50	
Teaming	1,119 86	
As per item No. 40 of expenses . .		$22,709 88
Balance unexpended . .		$78 79

Sewers, (Construction, "Bath Street").

Appropriation	$13,934 30
Revenue	30 00
	$13,964 30

RECEIVED.

For Sand, as per item No. 27 of receipts	$30 00

EXPENDED.

For Advertising	$1 00	
Bricks	2,177 55	
Carpenter work	12 27	
Castings	21 25	
Cement	338 40	
Contract, A. W. Bryne . . .	7,061 18	
Hardware, tools and repairs . .	4 00	
Labor, as per pay-rolls . . .	3,855 02	
Lumber	266 85	
Pipe	21 01	
Teaming	99 42	
As per item No. 41 of expenses . .		$13,857 95
Balance unexpended . .		$106 35

Sewers (Construction, "Front Street").

Appropriation		$5,000 00

EXPENDED.

For Labor, as per pay-rolls	$388 60	
Lumber	134 49	
Teaming	12 75	
As per item No. 42 of expenses		$535 84
Balance unexpended		$4,464 16

Sewers (Maintenance).

Appropriation		$21,300 00
Estimated revenue		1,700 00
Surplus revenue		204 80
Transferred from incidental expenses		4,000 00
Sewers, construction		1,500 00
		$28,704 80

RECEIVED.

For Dredging Bridge Street sewer outlet, from city of Somerville ($\frac{5}{9}$ expense)	$1,741 28	
Labor and materials	163 52	
As per item No. 28 of receipts	$1,904 80	

EXPENDED.

For Advertising and printing	$45 20	
Binding plans	16 00	
Bricks	2,958 80	
Carpenter work	134 91	
Castings	178 94	
Cement	761 65	
Cleaning catch-basins	1,267 00	
Amounts carried forward	$5,362 50	$28,704 80

Amounts brought forward	$5,362 50	$28,704 80
For Contract, Boynton Bros., dredging	2,712 00	
Cordage	17 17	
Derrick fittings	39 00	
Expressage	5 90	
Fuel	60 00	
Gas	2 82	
Gravel	63 00	
Hardware, tools and repairs	663 60	
Harness and repairs	26 80	
Hay and grain	306 46	
Horse hire	9 00	
Horse medicines	18 35	
Horse shoeing and clipping	80 50	
Hose and repairs	69 57	
Labor, as per pay-rolls	13,776 66	
Ladders	10 00	
Lumber	1,413 86	
Medical attendance to injured man	4 00	
Moving and repairing shed	34 92	
Oil	15 13	
Paving	207 93	
Pipe	2,108 75	
Rubber goods	112 50	
Sand	12 00	
Stable:—		
Fixtures	116 89	
Foundation	34 38	
Painting, plumbing, etc.	96 45	
Sundries	11 80	
Teaming	926 69	
Wagon repairs	67 00	
As per item No. 43 of expenses		$28,385 63
Balance unexpended		$319 17

Shade Trees and Public Grounds.

Appropriation		$4,500 00
Revenue		108 58
Transferred from Street Department (Paving) .		22 02
		$4,630 60

RECEIVED.

For Horse	$65 00	
Trimming and removing trees .	43 58	
As per item No. 29 of receipts . .	$108 58	

EXPENDED.

For Elm trees	$47 00	
Hardware, tools, etc.	56 87	
Horse	150 00	
Hose	24 00	
Labor, as per pay-rolls . . .	3,967 08	
Lumber	39 65	
Plants, seeds, etc.	95 50	
Printing	6 00	
Re-setting steps (Soldiers' Monument)	220 00	
Signs	24 50	
As per item No. 44 of expenses . .		$4,630 60

Sinking Funds.

Appropriation	$51,145 00

EXPENDED.

For Amount paid to Commissioners for 1888 as per item No. 45 of expenses	51,145 00

Sinking Funds (Commissioners of).

Amount of Fund, Nov. 30, 1887		$428,564 59

RECEIVED.

From City Treasurer, being amount appropriated by the City Council, to be derived from taxation	$51,145 00	
For Premiums and interest accumulations, ...	20,258 69	
		71,403 69
Amount of Sinking Fund Nov. 30, 1888 . . .		$499,968 28

State Aid.

Appropriation		$2,500 00
Estimated revenue		11,000 00
		$13,500 00

RECEIVED.

From Commonwealth of Mass. . .	$10,844 00	
Town of Medfield	72 00	
For Sundry authorized payments disallowed	63 50	
As per item No. 30 of receipts . . .	$10,979 50	

EXPENDED.

For Carriage hire, committee . .	$1 75	
Expenses of clerk	4 15	
Indigent aid, as per pay-rolls .	2,290 00	
Military aid, as per pay-rolls .	9,036 00	
Salary, C. L. Russell, clerk . .	480 00	
As per item No. 46 of expenses . .		$11,811 90
Balance unexpended . . .		$1,688 10

Stationery and Printing.

Appropriation		$4,000 00
EXPENDED.		
For Advertising	$452 22	
City Documents	1,020 02	
Printing	1,142 80	
Stationery	1,375 82	
As per item No. 47 of expenses		$3,990 86
Balance unexpended		9 14

Street Department (Extension of Charles River Street).

Appropriation	$1,100 00
EXPENDED.	
For Labor, as per item No. 48 of expenses	100 00
Balance unexpended	$1,000 00

Street Department (Extension of De Wolfe Street).

Appropriation	$1,800 00
EXPENDED.	
For Labor, as per item No. 49 of expenses	200 00
Balance unexpended	$1,600 00

Street Department (Extension of Winsor Street).

Appropriation		$5,600 00
EXPENDED.		
For Labor, as per pay-rolls	$880 00	
Land of Moses A. Dow estate	666 62	
Land of Lloyd G. Stone *et al.*	4,008 11	
As per item No. 50 of expenses		5,554 73
Balance unexpended		$45 27

Street Department (Paving).

Appropriation		$9,000 00
Estimated revenue		6,000 00
Surplus revenue		151 37
		$15,151 37
Transferred to Shade Trees and Public Grounds	$22 02	
Street Department epairs	106 02	
		$128 04
		$15,023 33

RECEIVED.

For Labor and materials	$981 23
Sidewalk assessments	5,170 14
As per item No. 31 of receipts	$6,151 37

EXPENDED.

For Advertising	$36 00	
Bricks	2,667 07	
Cement	8 60	
Cutting paving blocks	177 30	
Edgestones	3,038 65	
Gravel	217 30	
Labor, as per pay-rolls	8,143 52	
Lanterns	27 00	
Oil	31 32	
Paving blocks	592 00	
Sand	18 50	
Tools	33 55	
Twine and chalk	5 19	
As per item No. 51 of expenses		$14,996 00
Balance unexpended		$27 33

Street Department (Paving Main Street).

Appropriation		$18,239 88

EXPENDED.

For Gravel	$980 07	
Labor, as per pay-rolls	3,159 81	
Paving blocks	14,100 00	
As per item No. 52 of expenses		$18,239 88

Street Department (Paving "North River Flagging Stone").

Appropriation	$1,000 00
Transferred from Street Department (Repairs)	113 26
	$1,113 26

EXPENDED.

For North River flagging stone as per item No. 53 of expenses	$1,113 26

Street Department (Repairs).

Appropriation	$99,000 00
Estimated revenue	2,000 00
Surplus revenue	61 49
Transferred from Street Department (Paving)	106 02
	$101,167 51
Transferred to North River Flagging Stone	113 26
	$101,054 25

RECEIVED.

For Ashes	$163 75	
Chopping blocks	43 75	
Filling	305 65	
Gravel	9 55	
Horses	195 00	
Labor	41 92	
Manure	132 00	
Amounts carried forward	$891 62	$101,054 25

Amounts brought forward . .	$891 62	$101,054 25
For Old material	8 80	
Plank sidewalk (Brattle Street)	264 95	
Rebate	1 35	
Repairs on watering cart . . .	9 76	
Sand	5 30	
Scrapings	623 55	
Screenings	2 50	
Stone	43 66	
Use of horse	210 00	
As per item No. 32 of receipts . .	$2,061 49	

EXPENDED.

For Brooms	61 00	
Carpenter work	26 82	
Carriage hire for committee . .	82 00	
Carts and pung	130 00	
Dating stamps	20 00	
Freight	8 25	
Fuel	864 45	
Gas	214 68	
Gas fittings	14 31	
Gravel	109 50	
Hardware, tools and repairs . .	1,472 75	
Harness and repairs	687 26	
Hay and grain	5,960 95	
Horse hire and board	147 00	
Horses	1,175 00	
Hose, couplings, etc.	29 56	
Labor as per pay-rolls :—		
Regular men	38,060 60	
Transient men	21,057 59	
Lumber, lime and cement . .	599 85	
Oatmeal	20 25	
Packing	15 24	
Paints, oils, etc.	58 97	
Amounts carried forward . .	$70,816 03	$101,054 25

Amounts brought forward . .	$70,816 03	$101,054 25
For Plank sidewalk, Brattle Street, (rebate)	242 42	
Printing and stationery . . .	24 90	
Refreshments for committee .	5 00	
Rubber boots	15 00	
Salary, John McSorley, superintendent	1,700 00	
Salt	106 88	
Sand screen	14 00	
Screenings	172 50	
Sponges	30 62	
Stone	9,708 99	
Street signs	260 50	
Sundries	51 32	
Teaming	17,455 30	
Telephone rent	20 00	
Veterinary surgeon and medicines	35 45	
Wagon and cart repairs . . .	395 34	
As per item No. 54 of expenses . .		101,054 25

Street Department Repairs (Sea Wall on Charles River at Mill Pond).

Appropriation	$4,500 00

EXPENDED.

For Sea wall (contract with Charles Linehan)	$3,176 60	
Dredging	250 00	
As per item No 55 of expenses . .		$3,426 60
Balance unexpended . . .		$1,073 40

Street Department (Watering).

Appropriation		$4,000 00
Estimated revenue		12,000 00
Surplus revenue		52 84
		$16,052 84

RECEIVED.

From Sundry persons for a portion of the expense of sprinkling sundry streets, as per item No. 33 of receipts	$12,052 84	

EXPENDED.

For Conductors and hose	$57 10	
Hardware, tools and repairs	103 15	
Labor, as per pay-rolls	1,362 34	
Labor, sprinkling by contract	11,790 95	
Labor, repairing and painting carts	167 33	
Lumber	79 45	
Paint, varnish, etc.	95 38	
Rebate	14 35	
Sprinklers and repairs	1,332 27	
Springs	64 98	
Stand-pipes, valves, etc.	670 05	
Tank	64 00	
Use of horse	232 00	
As per item No. 56 of expenses		16,033 35
Balance unexpended		$19 49

Street Department (Widening Front Street).

Appropriation	$50,000 00
Revenue	3,500 00
	$53,500 00
Amount carried forward	53,500 00

Amount brought forward		$53,500 00

RECEIVED.

For Premium on bonds as per item No. 34 of receipts	$3,500 00	

EXPENDED.

For Land and damage:—		
First Universalist Society .	$22,000 00	
Elizabeth Lang	10 00	
Thomas H. Luther	1,000 00	
Wm. J. Marvin	650 00	
Leonard Morrill	5,000 00	
Charles A. Sawyer	2,750 00	
Isabella W. Stone and Melinda E. Leathe	3,000 00	
Printing	63 45	
Serving notice to abutters . .	15 00	
As per item No. 57 of expenses . .		$34,488 45
Balance unexpended . .		$19,011 55

Street Department (Widening Inman Street).

Appropriation		$2,600 00

EXPENDED.

For Land and damage:—		
Edwin Dresser . , ...	$600 00	
Martha B. Wellington . .	550 00	
As per item No. 58 of expenses . .		$1,150 00
Balance unexpended . .		$1,450 00

Street Department (Widening Main Street).

Appropriation	505 00

EXPENDED.

For Land of Asa P. Morse, as per item No 59 of expenses	$504 87
Balance unexpended	13

Tax (Corporation).

RECEIVED.

From the Commonwealth of Massachusetts, for the year 1888, as per item No. 35 of receipts	$51,289 26

Tax (National Bank).

RECEIVED.

From the Commonwealth of Massachusetts for the year 1888, as per item No. 36 of receipts	$16,887 57

EXPENDED.

For amount paid the Commonwealth of Massachusetts for the year 1888, for non-resident bank stock, as per item No. 61 of expenses . .	$5,804 11
Balance	$11,083 46

Tax (County).

EXPENDED.

For amount paid the County of Middlesex for the year 1888, as per item No. 60 of expenses . .	$39,342 40

Tax (Lien Account).

Paid Nov. 30, 1887	$17,134 00

RECEIVED.

From sundry persons for tax titles released, as per item No. 37 of receipts	166 76
	$16,967 24

EXPENDED.

For tax-titles, as per item No. 62 of expenses	518 08
Balance Nov. 30, 1888	17,485 32

Tax (State).

EXPENDED.

For Amount paid Commonwealth of Massachusetts for State Tax, 1888, as per item No. 63 of expenses	$70,110 00

Taxes of 1881.

EXPENDED.

Balance uncollected Nov. 30, 1887	$9,277 09

RECEIVED.

From sundry persons, as per item No. 38 of receipts	4 00
Balance uncollected Nov. 30, 1888	$9,273 09

Taxes of 1882.

Balance uncollected Nov. 30, 1887	$7,674 28

RECEIVED.

From sundry persons, as per item No. 39 of receipts	16 00
Balance uncollected Nov. 30, 1888	$7,658 28

Taxes of 1883.

Balance uncollected Nov. 30, 1887	$8,906 25

RECEIVED.

From sundry persons, as per item No. 40 of receipts	180 00
Balance uncollected Nov. 30, 1888	$8,726 25

Taxes of 1884.

Balance uncollected Nov. 30, 1887	$8,816 58

RECEIVED.

From sundry persons, as per item No. 41 of receipts	315 36
Balance uncollected Nov. 30, 1888	$8,501 22

Taxes of 1885.

Balance uncollected Nov. 30, 1887	$10,318 00

RECEIVED.

From sundry persons, as per item No. 42 of receipts	581 05
	$9,736 95

Taxes of 1886.

Balance uncollected Nov. 30, 1887	$14,370 15

RECEIVED.

From sundry persons, as per item No. 43 of receipts	$4,028 50
	$10,341 65

Taxes of 1887.

Balance uncollected Nov. 30, 1887		$84,441 30
Additional assessments		488 00
		$84,929 30

RECEIVED.

From sundry persons as per item No. 44 of receipts		71,272 80
Balance uncollected Nov. 30, 1888		$13,656 50

Taxes of 1888.

Assessors' Warrants:—		
Original	$977,764 00	
Additional	5,065 50	
		$982,829 50

RECEIVED.

From sundry persons as per item No. 45 of receipts		909,639 50
Balance uncollected Nov. 30, 1888		$73,190 00

Water Works (Construction).

Appropriation		$25,000 00
Revenue		620 00
		$25,620 00

RECEIVED.

For Grading Cushing Street	$20 00	
Old boiler and engine	600 00	
As per item No. 46 of receipts	$620 00	

EXPENDED.

For Fence at Fresh Pond	$918 88	
Fuel	7 25	
Gate house at Fresh Pond	247 39	
Labor, as per pay-rolls	7,964 76	
Extra	17 20	
Lead	520 66	
Amounts carried forward	$9,676 14	$25,620 00

Amounts brought forward . .	$9,676 14	$25,620 00
For Lumber and cement	998 37	
Meters, etc.	377 89	
Packing	38 37	
Paving	252 40	
Pipe and fittings	5,107 55	
Post hydrants, water gates, boxes, valves, etc.	1,569 98	
Setting gate at Alewife Brook .	46 88	
Sluice gate	300 00	
Sodding at Fresh Pond . . .	1,875 00	
Stone wall at Fresh Pond . .	548 76	
Teaming	4,085 50	
As per item No 64 of expense . .		$24,876 84
Balance unexpended . .		$743 16

Water Works (Construction, Fresh Pond Land Account).

Appropriation	$16,606 70
Revenue	62 65
	$16,669 35

RECEIVED.

For Recording deeds	$2 15
Sale of fruit	60 50
As per item No. 47 of receipts . .	$62 65

EXPENDED.

For Court expenses	$79 30	
Examination of title . . .	35 00	
Execution, Rosella M. Gay .	276 81	
Land, Middlesex Inst. for Savings	15,000 00	
Recording deed, etc.	9 46	
As per item No. 65 of expenses .		$15,400 57
Balance unexpended . .		$1,268 78

Water Works (Construction, Stony Brook Account).

Appropriation		$76,132 32
Revenue		2,377 00
		$78,509 32

RECEIVED.

For Premium on bonds	$2,368 00	
Sundry collections	4 00	
Tickets to Stony Brook	5 00	
As per item No. 48 of receipts	2,377 00	

EXPENDED.

For Bonds	$30 00	
Bricks	16 50	
Car-fares	93 53	
Castings	78 67	
Cement	15 00	
Commissioners in case of Roberts *vs.* Cambridge	367 50	
Dam at Stony Brook: —		
H. H. Pike & Son balance of contract	24,428 63	
Extra labor and materials	2,670 27	
Drain and sewer work	485 85	
Driving well	14 50	
Executions: —		
Wm. B. Davis *et al.*	1,245 02	
Lucinda A. Ellis	426 89	
Amasa Harrington *et al.*	1,232 79	
Hamblin L. Hovey	3,097 58	
Bridget Keefe *et al.*	2,439 83	
Elijah J. Loring	5,016 23	
James McCann	1,315 78	
Isabella C. Millar	3,261 15	
Wm. Roberts *et al.*	6,132 08	
Amounts carried forward	$52,367 80	$78,509 32

Amounts brought forward	$52,367 80	$78,509 32
For Fuel	88 28	
Gate house at Stony Brook	3,716 81	
House and stable at Stony Brook	2,501 46	
Labor, as per pay-rolls	1,519 23	
Laying pipe, reserve on H. H. Pike & Son's contract	50 00	
Legal expenses	3 40	
Lumber	243 11	
Machine for indicating height of water	63 75	
Mason work	6 75	
Medical attendance to injured man	25 00	
Pipe, fittings, etc.	58 33	
Plumbing	8 95	
Pump	16 05	
Recording deeds, etc.	2 25	
Repairing screens	101 00	
Running pump for Roberts mill	59 00	
Services of:—		
Wm. S. Barbour, Engineer	1,000 00	
N. Henry Crafts, Engineer	467 24	
B. B. Johnson, Esq.	79 00	
Experts	106 50	
Sign boards	57 50	
Stenographic report	239 32	
Teaming	69 50	
Typewriting	8 16	
Tools	25 00	
Water	122 70	
As per item No. 66 of expenses		$63,006 09
Balance unexpended		$15,503 23

Water Works (Interest on Water Loan).

Appropriation		$90,500 00
Revenue		228 00
		$90,728 00

RECEIVED.

For accrued interest on bonds sold, as per item No. 49 of receipts . .	$228 00	

EXPENDED.

For Interest on funded loan: —		
Coupon bonds	69,850 00	
Registered bonds	19,915 00	
As per item No. 67 of expenses . .		$89,765 00
Balance unexpended . . .		963 00

Water Works (Maintenance).

Appropriation		$42,500 00

EXPENDED.

For Advertising and printing . . .	$201 59	
Carriage hire	97 50	
Car tickets	282 88	
Castings	199 89	
Catch-basins	83 13	
Coal car	85 00	
Directories	7 50	
Engine supplies	159 41	
Expense of entertaining New England Water Works Association	497 60	
Expressage and freight . . .	657 75	
Fuel	4,813 97	
Gas	153 15	
Gravel	26 50	
Amounts carried forward . .	$7,265 87	$42,500 00

	Amounts brought forward . .	$7,265 87	$42,500 00
For	Hardware, tools, etc	944 11	
	Harnesses	52 29	
	Hay and grain	563 28	
	Horse	115 00	
	Horse shoeing and clipping . .	129 29	
	Hose and couplings	129 72	
	Ice	19 20	
	Labor, as per pay-rolls . . .	17,324 48	
	Extra	264 00	
	Loam	680 17	
	Lumber, lime and cement . .	1,937 61	
	Manure	84 15	
	Newspapers	12 50	
	Paints, oils, etc	111 59	
	Paving blocks, bricks, etc . .	14 00	
	Pipe and fittings	207 21	
	Plants, etc.	87 75	
	Refreshments	76 63	
	Removing night-soil	4 00	
	Rent of office and shop . . .	600 00	
	Rubber boots	14 75	
	Salaries:—		
	Hiram Nevons, Supt. . . .	2,091 43	
	Walter H. Harding, Registrar	1,800 00	
	Walter H. Harding, Clerk of Board	200 00	
	E. C. Brooks, Engineer . .	1,500 00	
	John L. Harrington, Foreman	1,200 00	
	Sundry clerks	1,044 17	
	Scales	68 74	
	Sealing press	10 00	
	Stationery and postage . . .	164 07	
	Stove	48 90	
	Sundry repairs	866 02	
	Sundry supplies	63 62	
	Teaming	1,573 50	
	Telegrams	1 58	
	Amounts carried forward . .	$41,269 63	$42,500 00

Amounts brought forward	$41,269 63	$42,500 00
For Telephones, rent, tolls and repairs	239 52	
Thawing machine	26 00	
Travelling expenses of superintendent	9 30	
Wagons and carts	406 87	
As per item No. 68 of expenses		$41,951 32
Balance unexpended		$548 68

Water Works (Rates, Fines, etc.).

RECEIVED.

From sundry persons, for water rates, fines, etc., as per item No. 50, of receipts	$217,656 73

EXPENDED.

For Water Works (Construction)	$24,256 84	
Water Works (Interest on Water Loan)	89,537 00	
Water Works (Maintenance)	41,951 32	
Water Works (Abatements)	3,842 78	
Water Works (Refunds)	2,002 73	
Water Works (Sinking Fund)	56,066 06	
		$217,656 73

Water Works (Rates, Fines, etc., Abatements).

Appropriation	4,000 00

EXPENDED.

For abatements as per item No. 69 of expenses	3,842 78
Balance unexpended	157 22

Water Works (Rates, Fines, etc., Refunds).

Appropriation	$2,500 00

EXPENDED.

For refunds, as per item No. 70 of expenses	2,002 73
Balance unexpended	497 27

Water Works (Sinking Funds)

Appropriation	$49,575 00
Surplus receipts of Water Works	7,424 42
	$56,999 42

EXPENDED.

For amount paid to Trustees of Sinking Fund of Water Works, as per item No. 71 of expenses	56,999 42

Water Works (Trustees of Sinking Fund).

Amount of Fund Nov. 30, 1887		$838,597 01

RECEIVED.

From City Treasurer for amount due and appropriated from the revenue of the Water Works also the surplus revenue	$56,999 42	
Premiums and interest accumulations	33,345 57	
		90,344 99
		$928,942 00

EXPENDED.

For water bonds matured April 1, 1888 as per item No. 21 of expenses	175,000 00
Amount of Fund Nov. 30, 1888	$753,942 00

Water Works (Supplies).

Appropriation		$6,183 32
Amount carried to Abatements . .	$33 65	
Amount carried to Sinking Fund .	933 36	
		$967 01
		$5,216 31

RECEIVED.

For Supply pipes, fittings and labor as per item No. 52 of receipts . .	$6,183 32	

EXPENDED.

For Labor, as per pay-rolls . . .	$1,975 00	
Pipes, fittings, etc.	3,241 31	
As per item No. 72 of expenses . .		$5,216 31

Water Works (Supplies, Abatements).

Appropriation	$200 00

EXPENDED.

For abatements, as per item No. 73 of expenses .	33 65
Balance unexpended	$166 35

Cambridge Water Works in account with the City of Cambridge, for the year ending Nov. 30, 1888: —

RECEIPTS AND EXPENDITURES.

Balance in the City Treasury to the credit of Water Works accounts, Nov. 30, 1887 :—		EXPENDED.	
Fresh Pond Land . . .	$16,606 70	For Construction, general	$24,876 84
Stony Brook	3,032 32	Construction. Fresh Pond Land . . .	15,400 57
Total	$19,639 02	Construction, Stony Brook	63,006 09
RECEIVED.		Interest on Water Loan	89,765 00
From Sale of bonds :		Maintenance . . .	41,951 32
Stony Brook series .	$73,000 00	Abatements, R. F. etc.	3,842 78
Premiums and accrued interest	2,596 00	Refunds, R. F. etc.	2,002 73
Other revenue on bond accounts	71 65	Sinking Funds . .	56,999 42
From revenue on construction account . .	620 00	Supplies	5,216 31
From revenue on rates, fines, etc.	217,656 73	Abatements, supplies	33 65
From revenue on supplies	6,183 32	*Balance carried over	16,672 01
	$319,766 72		$319,766 72

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* Balance brought forward to the credit of the Cambridge Water Works, Nov. 30, 1888:—

Water Works (Coustruction, Fresh Pond Land)	$1,268 78
Water Works (Construction, Stony Brook)	15,403 23
	$16,672 01

Taxes.

The amount of taxes assessed by the Board of Assessors, on the real and personal estates and polls of Cambridge, for the year 1888, was as follows:—

Valuation of real estate	$48,420,600	00
Valuation of personal estate	14,296,740	00
	$62,717,340	00

Assessed at $15.00 per $1,000 gives	$940,760	10
17,727 polls, at $2.00	35,454	00
1,439 polls of women, at .50 each	719	50
Bank stock (non-resident separately assessed)	5,895	90
	$982,829	50

This tax is divided as follows: —

For City purposes*	$848,000	00
County assessments	39,342	40
Overlay	14,415	70
State assessments	70,110	00
State charge for non-resident bank stock	5,895	90
Additional Assessments	5,065	50
	$982,829	50

Increase in the number of polls since last year	$947\frac{2}{4}$	
$947\frac{2}{4}$ polls at $2.00	$1,895	00
Increase in real estate valuation	2,075,900	00
Increase in personal valuation	937,830	00
Total gain in valuation since last year	$3,015,625	00

Number of houses in 1888	9,927
Number of houses in 1887	9,761
Number of houses built during the past year	166

Number of horses assessed	3,688
Number of cows assessed	421
Number of swine assessed	98

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* To meet the city expenses, the income from various departments is added to this sum raised by taxation.

Statement of the valuations of the personal property and real estate of the City of Cambridge, with the number of polls, dwellings, and rate of taxation for the past ten years :—

Year.	Polls.	Personal.	Real Estate.	Total.	Dwellings.	Rate per $1000
1879	11,892	$11,892,898	$37,345,200	$49,238,098	8,137	$17 00
1880	12,644	11,699,660	37,929,400	49,629,060	8,165	16 00
1881	13,678	12,401,390	38,691,900	51,093,290	8,331	16 00
1882	13,922	11,577,080	39,091,200	50,668,280	8,489	16 60
1883	14,870	11,975,640	39,821,700	51,797,340	8,572	16 40
1884	15,399¼	12,259,491	41,289,200	53,548,691	8,781	16 80
1885	16,036	12,758,255	42,588,300	55,346,555	9,106	15 50
1886	16,534½	14,490,470	44,955,200	59,445,670	9,398	15 00
1887	17,139¼	13,358,910	46,344,700	59,703,610	9,761	16 00
1888	18,086¾	14,296,740	48,420,600	62,717,340	9,927	15 00

Abatement and discounts upon taxes for the past ten years :—

Year.	Total Tax.	Total Abatement	Total Discounts, at 4 per cent., except 1887 and 1888 at 3 per cent.	Amount of tax uncollected Dec. 1, each year.
1879	$869,395 00	$30,577 37	$29,305 80	$95,352 28
1880	826,079 23	17,142 79	28,383 13	72,534 65
1881	850,730 61	12,958 90	30,029 45	68,562 84
1882	873,793 41	12,230 20	30,783 78	64,448 68
1883	885,938 96	14,784 62	31,188 00	67,482 66
1884	937,938 64	11,210 31	32,926 83	79,726 52
1885	895,012 06	14,174 11	32,781 78	64,335 30
1886	930,228 50	17,497 00	32,532 57	74,497 50
1887	995,964 90	15,443 74	26,054 53	84,441 30
1888	982,829 50	21,667 20	25,366 53	73,190 00

Temporary loans for the past ten years, and interest paid upon the same:—

Year.	Temporary Loan.	Interest paid upon the Loan.
1879	$352,000	$7,230 20
1880	350,000	6,660 94
1881	575,000	9,933 48
1882	525,000	9,720 05
1883	600,000	14,880 25
1884	540,000	15,795 37
1885	300,000	13,790 52
1886	450,000	5,653 83
1887	555,000	9,222 24
1888	400,000	9,497,36

Respectfully submitted,

HARRY T. UPHAM,

Auditor of Accounts.

ANNUAL REPORT

OF

THE COMMITTEE ON FINANCE.

The following is the annual report of the Committee on Finance for the financial year ending November 30, 1888.

The final monthly sheet of the Auditor of Accounts, made up to the close of the month of November, shows that the total money transactions of the city treasury during the year 1888, including both sides of the account, amounted to the sum of $4,692,793.00. The amount paid from the city treasury under the various headings of accounts was $2,335,878.83. Of this latter sum the greater portion was anticipated and provided for in the annual estimates made by this committee, and submitted in the month of February. These estimates contained several items of expenditure previously contemplated, and already provided for in the amount subsequently levied by taxation upon the polls and estates of the city. Several of the appropriations were increased from time to time, during the year, as exigencies arose, and the following new appropriations were made by orders of the City Council, viz: —

City Hall Land	$94,000 00
Sewer in Front Street	5,000 00
Inman Street, Widening . . . . , ...	2,600 00

Of these, the first two were provided for by the creation of a city debt, and the last was included in the amount to be met from revenue not otherwise appropriated.

The following is a recapitulation of the estimates of the ways and means, reported by this committee at the beginning of the year, and adopted by the City Council:—

Recapitulation of Estimates.

	Expenses.	Revenue.	Appropriation.
City Department accounts	$1,105,600 00	$100,550 00	$1,005,050 00
Water Department accounts	213,575 00	213,575 00	. . .
	$1,319,175 00	$314,125 00	$1,005,050 00

(The water department being self-supporting, deriving its income from water rates, fines and supplies, its expenses form no part of the sum annually raised by taxation.)

Appropriations, 1888.

Estimated expenses on appropriation accounts, including Water Department accounts	$1,319,175 00
Allowance for estimated uncollected taxes of the year 1888, remaining uncollected as of Nov. 30, 1888	80,000 00
Total appropriations and liabilities	$1,399,175 00

Contra.

Cash in treasury Dec. 1, 1887	$84,390 54	
Estimated revenue on appropriation accounts	314,125 00	
Amount of Corporation Tax from Commonwealth for 1888, estimated	55,000 00	
Amount of National Bank Tax from Commonwealth for 1888, (estimated) $16,000 less $6,000	10,000 00	
Uncollected taxes 1887 and previous years (estimated)	65,000 00	
Proceeds from sale of City Lands, estimated)	2,5000 00	
Proceeds from sale of Mortgage Notes (estimated)	500 00	
		$531,515 54
Balance to be provided for		$867,659 46

This balance was subject to the necessary additions to be made by the assessors, the amount of which is given hereinafter.

It is shown by the foregoing statement that the sum of $867,659.46 was deemed necessary to be raised to meet the ordinary expenditures of the city for the year 1888. This sum was provided for as follows: —

1. By the issue of City Loan Bonds bearing interest not exceeding four per cent and running not exceeding ten years, to an amount equal to the appropriation, for land for High School-house	$20,000 00
2. By assessment upon the polls and estates of the inhabitants of Cambridge, etc., for the current year, being the amount required for municipal expenses for the year. (The State tax and County tax were added hereto by the Assessors according to law) .	$848,000 00
Total	$868,000 00
To the sum ordered to be raised by taxation as hereinbefore stated	$848 000 00

There were added by the Assessors :—

Amount of overlay	$14,415 70	
State tax for 1888	70,110 00	
County tax for 1888	39,342 40	
Non-resident Bank Tax	5,895 90	
Additional Warrants	5,065 50	
Apportioned Sewer Assessments	231 69	
Total additions		$135,061 19
Total amount of Assessors' Warrants		$983,061 19
Less Apportioned Sewer Assessment, credited to revenue account of Sewer Department		$231 69
Actual amount of tax upon Polls and Estates		$982,829 50
Of this sum there was collected and paid into the city treasury the sum of		$909,639 50
Leaving unpaid		$73,190 00
Allowance for estimated uncollected taxes of the year 1888, remaining uncollected as of Nov. 30, 1888		$80,000 00
Amount actually uncollected as above stated		73,190 00
Amount received from this source in excess of estimate .		$6,810 00
The amount received from uncollected taxes for the year 1887 and previous years was	$76,397 71	
Amount estimated	65,000 00	
Amount received from this source in excess of estimate		11,397 71
Amount received from taxes in excess of estimates made at beginning of the year		$18,207 71

In other accounts there was an excess of revenue over the estimates as shown below:—

	Estimated Revenue.	Actual Revenue.	Excess.
On Appropriation Accounts, not including Water Works, and appropriations provided for by loans	$100.990 90	$110,414 08	$9,423 18
City Lands	2,500 00	7,228 80	4,728 80
Mortgage Notes	500 00	1,303 94	803 94
Betterment Assessments		644 00	644 00
National Bank Tax (net)	10,000 00	11,083 46	1,083 46
	113,990 90	$130,674 28	$16,683 38

The excess of receipts above the estimates upon the foregoing accounts was			$16,683 38
Add excess of receipts of taxes above estimate			18,207 71
Amount of surplus revenue from the sources above named			$34,891 09
Deduct the following deficiencies:—			
Amount of Corporation Tax from Commonwealth (estimated)		$55,000 00	
Amount of Corporation Tax from Commonwealth actually received		51,289 26	
Deficiency in receipts from this source		$3,710 74	
Amount paid on Tax Lien account	$518 08		
Amount received	166 76		
Deficiency from this source		$351 32	
Total deficiency from the two sources above mentioned			$4,062 06
Leaving net surplus revenue			$30,829 03
Net surplus revenue in 1887			25,095 05
Increase in 1888 over previous year			$5,733 98

Following is a statement showing the total amount of appropriations made from time to time during the year, and the expenditures thereunder.

City Department Accounts.

The gross amount appropriated at the beginning of the year in accordance with the estimates of this committee, and included in the tax levy, was			$1,105,600 00

Apditional Appropriations (Special) not included in the Tax Levy: —

Harvard Bridge, unexpended balance brought over from 1887	$97,104 82		
Additional in 1888, to be met by loan . . . . . , . . .	100,000 00		
Premium, etc., on bonds negotiated	7,395,00		
		$204,499 82	
City Hall Land, special appropriation, to be met by loan		94,000 00	
Sewers, Construction, Bath Street, unexpended balance brought over from 1887 . .	$13,934 30		
Revenue	30 00		
		13,964 30	
Sewers, Construction, Front Street, special appropriation, to be met by loan		5,000 00	
Street Department, Widening and Extension of Front Street, special appropriation to be met by loan	$50,000 00		
Premium on bonds negotiated	3,500 00		
		53,500 00	
Street Department, Widening Inman Street special appropriation provided for from unappropriated surplus revenue		2,600 00	
Total amount of special appropriations			$373,564 12

Additions to Regular Appropriations during the year: —

Abatements, Taxes, additional appropriation from unappropriated surplus revenue and by transfer	$6,167 20	
Cambridge Public Library, addition of surplus revenue	17 12	
Amounts carried forward	$6,184 32	$1,479,164 12

Amounts brought forward		$6,184 32	$1,479,164 12
City Engineering, addition of surplus revenue and transfer		67 20	
Fire Department, transfer from other appropriations, and addition of surplus revenue		1,000 59	
Fire Department, New Truck-House, transfer from Fire Department		35 77	
Interest, addition of surplus revenue and transfer		1,057 25	
Pauper Department, transfer from other Pauper Department appropriations		3,783 35	
Pauper Department, Almshouse, addition of surplus revenue		3,140 79	
Pauper Department, House Offal, surplus revenue		421 50	
Salaries, transfer from other appropriations		141 66	
School Department, Salaries, addition of surplus revenue		233 11	
School-houses, Care and Repair, transfer from other appropriations		1,215 39	
School-houses, New, etc., Peabody School-house, additional appropriation from unappropriated surplus revenue		2,500 00	
Sewers, Maintenance, transfer from Sewers, Construction		5,704 80	
Shade Trees and Public Grounds, transfer from other appropriations		130 60	
Street Department, Main Street, Paving, additional appropriation from unappropriated surplus revenue		2,139 88	
Street Department, Ordinary Paving and Repairs, addition of surplus revenue		23 33	
Street Department, North River flagging, transfer from Street Department, Repairs		113 26	
Street Department, Repairs, additional appropriation, from unappropriated surplus revenue	$5,000 00		
Transfer from other appropriations	54 25		
		5,054 25	
Street Department, Watering, addition of surplus revenue		52 84	
Gross amount of additions to appropriations		$32,999 89	
Amounts brought forward		$32,999 89	$1,479,164 12

Amounts brought forward			$32,999 89	$1,479,164 12
Reductions of Regular Appropriations: —				
City Buildings, Care and Repairs, transferred to other appropriations		$200 00		
Discounts, Taxes, transferred to Abatements, Taxes . .		1,633 47		
Incidental Expenses, transferred at sundry times	$4,229 72			
Additional appropriation	3,000 00			
Net amount transferred		1,229 72		
School Department, Drawing Schools, transferred to School-houses, Care and Repairs		$400 00		
School-houses, New, etc., Putnam School-house, transferred to School-houses, Care and Repairs		145 26		
School-houses, Webster School-house, Plumbing, transferred to school-houses, Care and Repairs		470 13		
Sewers, Construction, transferred to Sewers, Maintenance		3,211 33		
			7,289 91	
Net additions to regular appropriations . . .				25,709 98
Total amount of City Department appropriations in 1888				$1,504 874 10
The total expenditure under appropriation heads in the various City Departments, in 1888 was				1,339,609 53
Balances of appropriations unexpended				165,264 57

These unexpended balances were on the following City Department Accounts: —

Bridge, Harvard	$82,759 07
Bridges	222 72
Bridges, West Boston, Craigie, and Prison Point . . .	1,108 18
Cambridge Cemetery, Current Expenses	14 36
Amount carried forward	$84,104 33

Amount brought forward			$84,104 33
Cambridge Public Library			17 50
City Buildings, Care and Repairs			58 15
City Hall Land			475 33
Health Department			488 64
Interest			6,074 56
Lighting Streets			2,863 84
Pauper Department, Almshouse, New Buildings			11 69
Pauper Department, House Offal			308 00
Police Department			1,691 75
School Department, Drawing Schools			21 93
School Department, Evening Schools			101 50
School Department, Incidental Expenses			95 69
School Department, Industrial School			88 41
School Department, Salaries			259 31
School Department, Text-books and Stationery			363 14
School-houses, Care and Repairs			151 66
School-houses, land for High School-house			20,000 00
School-houses, New and Furniture, Peabody School-house			17,196 26
Sewers, Construction			78 79
Sewers, Construction, "Bath Street"			106 35
Sewers, Construction, "Front Street"			4,464 16
Sewers, Maintenance			319 17
State Aid			1,688 10
Stationery and Printing			9 14
Street Department, Extension Charles River Street			1,000 00
Street Department, Extension De Wolfe Street			1,600 00
Street Department, Extension Windsor Street			45 27
Street Department, Paving:			
Ordinary Paving and Repairs			27 33
Street Department, Repairs:			
Sea Wall on Charles River at Mill Pond			1,073 40
Street Department, Watering			19 49
Street Department, Widening, "Front Street"			19,011 55
Street Department, Widening. "Inman Street"			1,450 00
Street Department, Widening, Main Street			13
			$165,264 57
The gross amount expended under City Department appropriation heads, in 1888, was			$1,339,609 53
Less the following items not included in the tax levy:—			
City Hall Land		$93,524 67	
This expenditure was provided for as elsewhere stated in this report, by an appropriation of	$94,000 00		
Amounts carried forward	$94,000 00	$93,524 67	$1,339,609 53

Amounts brought forward		$94,000 00	$93,524 67	$1,339,609 53
And to be met as follows :				
By City Bond . .	$83,000 00			
Sale of houses . .	11,000 00			
		94,000 00		
Expended		93,524 67		
Balance unexpended . . .		$475 33		
Harvard Bridge			121,740 75	
The several appropriations for this purpose are hereinbefore stated :—				
Sewers, Construction, Bath Street			13,857 95	
The appropriations for this purpose are hereinbefore stated :—				
Street Department, Front Street			34,488 45	
For this purpose the following sums were appropriated, as hereinbefore stated :—				
Appropriation to be met by loan		$50,000 00		
Premium on bonds issued . .		3,500 00		
Total		$53,500 00		
Amount expended as above stated		34,488 45		
Balance to be carried to next year		19,011 55		
				263,611 82
Balance paid from ordinary revenue and taxes				$1,075,997 71
The total expenditure under the usual appropriation heads, in the year 1887, was				1,030,844 62
Increase in 1888, over the previous year				$45,153 09

Following are the usual comparative tables, showing the amounts expended upon the several appropriation accounts included in the figures above given, in the years 1887 and 1888, respectively, including only such items as were provided for in the annual tax levies.

CITY ACCOUNTS.	Expended in 1888.	Expended in 1887.	Increase.	Decrease.
Abatements (Taxes)	$21,667 20	$15,443 74	$6,223 46	
Bridges	2,777 28	3,496 76		$719,48
Bridges (W. Boston, Craigie's and Prison Point	5,591 82	7,307 47		1,715 65
Cambridge Cemetery:—				
Current Expenses	15,104 07	14,745 98	358 09	
Receiving Tomb	3,881 57		3,881 57	
Cambridge Public Library	7,299 62	8,532 65		1,233 03
Cambridge Public Library (Trust Fund)	1,000 00		1,000 00	
City Buildings (Care and Repairs)	11,241 85	10,496 49	745 36	
Discounts (Taxes)	25,366 53	26,054 53		688 00
Engineering	8,667 20	7,191 17	1,476 03	
Fire Department:—				
Ordinary Expenses	54,000 59	51,084 57	2,916 02	
New Building for H. & L. Truck, No. 2	7,135 77	10,045 52		2,909 75
Health Department	3,011 36	3,119 07		107 71
Incidental Expenses	32,770 28	29,638 75	3,131 53	
Interest	106,982 69	112,967 74		5,985 05
Lighting Streets	41,386 16	37,833 54	3,552 62	
Pauper Department	29,283 35	24,225 17	5,058 18	
Pauper Dep't (Almshouse)	26,140 79	23,443 11	2,697 68	
Pauper Dep't (Almshouse, New Buildings)	5,488 31		5,488 31	
Pauper Dep't (House offal)	17,613 50	15,422 29	2,191 21	
Police Department	86,308 25	80,223 88	6,084 37	
Salaries	26,941 66	26,458 33	483 33	
School Dep't (Drawing Schools)	1,403 07	1,074 64	328 43	
School Dep't (Evening Schools)	848 50	1,068 84		220 34
School Dep't (Incidental Expenses)	604 31	996 86		392 55
School Dep't (Industrial School)	411 59		411 59	
School Dep't (Salaries)	175,773 80	172,135 06	3,638 74	
School Dep't (Text-Books and Stationery)	10,936 86	10,992 00		55 14
School Houses (Care and Repairs)	36,063 73	38,905 58		2,841 85
School Houses (Land for School House on Linnæan Street)	6,825 00		6,825 00	
School Houses (New and Furniture, Peabody School House)	5,303 74		5,303 74	
School Houses (New and Furniture, Putnam Sch. House, Completion)	10,454 74	9,304 74	1,150 00	
School Houses (Webster School House, Plumb'g)	2,029 87	1,430 64	599 23	
Sewers (Construction)	22,709 88	28,815 89		6,106 01
Sewers (Maintenance)	28,385 63	14,587 64	13,797 99	
Amounts carried forward.	$841,410 57	$787,042 65	$77,342 48	$22,974 56

CITY ACCOUNTS.	Expended in 1888.	Expended in 1887.	Increase.	Decrease.
Amounts brought forward	$841,410 57	$787,042 65	$77,342 48	$22,974 56
Shade Trees and Public Grounds:—				
Ordinary Expenses.....	4,630 60	4,424 68	205 92	
Grading Dana Square....		500 00		500 00
Sinking Funds............	51,145 00	59,695 00		8,550 00
State Aid.................	11,811 90	12,869 00		1,057 10
Stationery and Printing...	3,990 86	2,995 19	995 67	
Street Dep't (Land for City Yard)...............		9,999 78		9,999 78
Street Dep't (Extension Charles River Street)....	100 00		100 00	
Street Dep't (Extension DeWolfe Street)........	200 00		200 00	
Street Dep't (Extension Windsor Street).........	5,554 73		5,554 73	
Street Dep't (Paving):—				
Main Street.............	18,239 88	16,000 98	2,238 90	
Harvard Street, south side, from Bow to Dunster Streets........		3,000 00		3,000 00
Ordinary Paving and Repairs.................	14,996 00	15,011 51		15 51
North River Flagging Stone..................	1,113 26	1,080 00	33 26	
Street Dep't (Repairs):—				
Steam Roller..		5,000 00		5,000 00
Bulk-head, Mt. Auburn Street................		2,974 30		2,974 30
Collecting Ashes and Repairs of Streets....	101,054 25	89,925 48	11,128 77	
Sea Wall on Charles River at Mill Pond.........	3,426 60		3,426 60	
Street Dep't (Watering)...	16,033 35	20,326 05		4,292 70
Street Dep't (Widening) "Inman Street"........	1,150 00		1,150 00	
Street Dep't (Widening) "Main Street"..........	504 87		504 87	
Totals................	$1,075,361 87	$1,030,844 62	$102,881 20	$58,363 95

Increase of expenditure in sundry appropriations . . .	$102,881 20
Decrease of expenditure in sundry appropriations . . .	58,363 95
Net increase over previous year	$44,517 25

Of the special appropriations for city departments made in the year 1888, the following unexpended balances will be carried forward into the next year, and added to the estimates, viz :—

Harvard Bridge (provided for by loan and premium on bonds)	$204,499 82	
Expended	121,740 75	
Balance carried forward		$82,759 07

Amount brought forward		$82,759 07
City Hall Land (provided for by loan and revenue from sale of buildings) . . .	$94,000 00	
Expended	93,524 67	
Balance		$475 33
Sewers (Construction: Bath and other streets ; provided for by loan) . . .	$13,964 30	
Expended	13,857 95	
Balance		$106 35
Sewers (Construction: Front Street; to be met by loan)	$5,000 00	
Expended	535 84	
Balance		$4,464 16
School Houses (Peabody School House), appropriation (included in tax levy of 1888)	$22,500 00	
Expended	5,303 74	
Balance (contracts begun and not completed)		$17,196 26
Street Department:—		
Extension of Charles River Street . .		$1,000 00
Extension of DeWolfe Street		1,600 00
Extension and Widening of Front St. .		19,011 55
Widening of Inman Street		1,450 00
Sea Wall on Charles River at Mill Pond		1,073 40
		$129,137 12

Provision has already been made for meeting a portion of the foregoing from cash reserved in the City Treasury, and constituting a part of the balance on hand at the close of the year, as follows:

Bridge loan, unexpended balance . . .		$61,770 62	
Sewer loan, unexpended balance . . .		106 35	
Contracts begun and not completed:—			
Peabody School House . .	$17,196 26		
Sea Wall at Mill Pond . .	1,073 40		
Extension of Charles River Street	1,000 00		
Extension of DeWolfe Street	1,600 00		
Widening of Inman Street .	1,450 00		
		22,319 66	
			$84,196 63
Amount carried forward			$84,196 63

Amounts carried forward	$84,196 63
*Amount to be provided for by loans already authorized but not yet negotiated	$44,940 49
Total	$129,137 12

Water Department.

Amount appropriated at the beginning of the year in accordance with estimates		$213,575 00

ADDITIONAL APPROPRIATIONS.

Water Works, Construction, Fresh Pond Land Account, balance of appropriation in 1887, brought over 1888	$16,606 70	
Revenue	62 65	
		16,669 35
Water Works, Construction, additional appropriation	$3,000 00	
Revenue	620 00	
		3,620 00
Water Works, Construction, Stony Brook Additional Water Supply, appropriation in 1887 brought over to 1888	51,132 32	
Additional appropriation	25,000 00	
Premium on loan and other revenues . . .	2,377 00	
		78,509 32
Water Works, Interest, Revenue		228 00
Water Works, Maintenance, additional appropriation .		2,500 00
Water Works, Abatements, additional appropriation .		500 00
Water Works, Sinking Fund, surplus receipts		7,424 42
Water Works, Supplies, surplus receipts (this sum is the difference between the amount estimated and the amount shown in Auditor's last monthly report) . .		683 32
Total amount of Water Department, appropriation in 1888		$323,709 41
Total expenditure		303,094 71
Balance unexpended		$20,614 70

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* N. B. The amount of loans already authorized for these purposes, and not yet issued, is		$45,000 00
The amount apparently required to provide for work begun and not completed, as shown by the above statement, is		44,940 49
Difference in the above two sums		$59 51

The apparent discrepancy may be accounted for as follows:

Amount expended on Front Street Sewer from surplus revenue of 1888 (the entire cost of which sewer was ordered to be met by a loan of $5,000)	$535 84	
Less unexpended balance of City Hall land appropriations (also met by a loan)	475 33	
Balance being the same as the above difference		$59 51

The following unexpended balances upon Water Department, appropriation accounts, are to be carried forward to the appropriations for the next year: —

Water Works, Construction, Fresh Pond Land account unexpended balance of appropriation (Fresh Pond Loan)		1,268 78
Water Works, Construction additional, unexpended balance of appropriation		15,503 23
Total		$16,772 01
The total amount of the balances unexpended upon the various Water Department accounts, as exhibited upon the final monthly sheet of the Auditor of Accounts, to December 1, 1888		$20,614 70
Less amounts to be carried forward to the appropriations of the next year		16,772 01
Balances unexpended in other Water Department accounts: —		
Abatements	$157 22	
Construction	743 16	
Interest on Water Loan	963 00	
Maintenance	548 68	
Rates, Fines, etc., refunds	497 27	
Supplies	767 01	
Supplies, Abatements	166 35	
Showing balances unexpended in ordinary Water Department accounts		$3,842 69

Of the surplus receipts on Water Department revenue accounts, the sum of $7,424.42 was added to the Sinking Fund of Water Works, according to law.

Provision was made from time to time during the year, for the creation of permanent loans, as follows: —

City Loans.

Harvard Bridge, amount authorized in 1887 and unissued prior to 1888	$90,000 00	
Bridge Loan, 1888, ...	100,000 00	
Front Street extension, 1888, ...	50,000 00	
Front Street grading, 1888, ...	16,000 00	
	256,000 00	
Amount issued in 1888	200,000 00	
Balance unissued		$56,000 00
City Hall Land, amount authorized . . .	$94,000 00	
Amount issued	83,000 00	
Balance unissued		$11,000 00
Amount carried forward		$67,000 00

Amount brought forward	$67,000 00
Sewers, Construction, Front Street amount authorized in 1888 and unissued . . .	5,000 00
High School Land, amount authorized in 1888, and unissued	20,000 00
Balance of City Loans authorized and unissued to Nov. 30, 1888	$92,000 00

Water Loans.

Water Works, Construction, Stony Brook Water Supply, amount authorized and unissued, prior to Dec. 1, 1887	$48,100 00	
Amount issued in 1888	48,000 00	
Balance unissued.		$100 00
Water Works, Construction, Stony Brook Water Supply, amount authorized in 1888	$25,000 00	
Amount issued in 1888	25,000 00	
Amount of Water Loans authorized and unissued to Nov. 30, 1888		$100 00

In addition to the balance last given, there are also loans authorized and unissued in years past on account of Water Works (Construction), but as these were for the expenses incurred in those years only during which the authority was given, they are omitted from the foregoing statement.

Included in the foregoing is the sum of 16,000—authorized loan on account of grading Front Street, approved Nov. 13, 1888, for which an appropriation of like amount was also made, but which item does not appear in the Auditor's list of appropriations. The item is omitted for the reason that the loan has not been called for and there has been no expenditure chargeable to the appropriation. The same amount will go forward into the appropriations for the next year.

Following is a schedule of the loans authorized, and negotiated, showing the amounts received:

City Loans Negotiated.

Of the total amount of loans thus authorized, a portion was negotiated as follows:

Harvard Bridge Loan. One Hundred Coupon Bonds, dated July 2, 1888, payable in thirty years with interest semi-annually at 4 per cent	$100,000 00	
Premium $4\frac{3}{100}$ per cent less interest, etc.	3,895 00	
Amount received		$103,895 00
Harvard Bridge Loan. One Hundred Coupon Bonds, dated Sept. 1, 1888, payable in thirty years with interest semi-annually at 4 per cent	$100,000 00	
Premium 7 per cent	7,000 00	
Amount received		$107,000 00
City Hall Land Loan. Eighty-three Coupon Bonds, dated Aug. 1, 1888, payable in ten years with interest semi-annually at 4 per cent	$83,000 00	
Premium $1\frac{795}{1000}$ per cent, less interest	1,489 85	
Amount received		$84,489 85
Total sum received		$295,384 85
Less amount of premium		12,384 85
Total amount of bonds issued		$283,000 00
Water Loans Negotiated. Water Works, (Construction, Stony Brook Water Supply,) part of unissued balance of 1887, ($48,100 00). Forty-six Coupon Bonds, dated July 2, 1888, payable in twenty years, with interest, semi-annually at 4 per cent	$46,000 00	
Premium, $3\frac{5}{100}$ per cent, less interest	1,403 00	
Amount received		$47,403 00
Part of unissued balance as aforesaid, One Coupon Bond, dated Nov. 1, 1887, payable in twenty years, with interest semi-annually at 4 per cent	$2,000 00	
Premium	25 00	
Amount received		$2,025 00
Amount authorized in 1888. Twenty-five Coupon Bonds, dated August 1, 1888, payable in twenty years, with interest semi-annually at 4 per cent	$25,000 00	
Premium, $3\frac{761}{1000}$ per cent	940 00	
Amount received		$25,940 00
Total sum received,		$75,368 00
Less amount of Premium		2,368 00
Total Water Bonds issued,		$73,000 00

The premium received upon the bonds thus issued was added to the several appropriations on account of which the bonds were respectively issued.

It appears by the foregoing that the actual additions to the city debt during the year have been as follows:—

City Debt.

Harvard Bridge Loan	$200,000 00	
City Hall Land Loan	83,000 00	
Total addition to gross City debt in 1888 .		$283,000 00

Water Debt.

Stony Brook Construction		$73,000 00
		$356,000 00

For full details relative to the present condition of the City and Water Debt, reference may be made to the report of the Auditor of Accounts.

The annual settlement with the Commonwealth was made as of November 30, 1888, and the transaction included in the accounts of the year, as follows:—

PAID THE COMMONWEALTH.

State tax, 1888	$70,110 00	
National Bank tax, 1888	5,804 11	
		$75,914 11

RECEIVED FROM THE COMMONWEALTH.

Corporation tax, 1888	$45,618 56	
National Bank tax, 1888	16,806 83	
State Aid, Acts 1879, Chap. 301	9,582 50	
Support of State paupers	10 51	
Support of State paupers, temporary . . .	112 41	
Burial of State paupers	33 00	
State aid, Acts 1879, Chap. 252	1,261 50	
		$73,245 31
Balance paid the Commonwealth		$2,488 80

The amount borrowed on temporary loans in 1887 and paid from the taxes of the year was	$555,000 00
Borrowed in 1888, and paid from taxes of the year	400,000 00
Decrease in 1888	155,000 00
The amount paid for interest on temporary loans was in 1888	9,497 36
Interest so paid in 1887	9,222 24
Increase in 1888	$275 12

A sub-committee consisting of Alderman Frank H. Teele, and Councilmen George E. Carter and Edward C. Wheeler, was appointed by this Committee, to examine the condition of the City Treasury at the close of the financial year, 1888. This sub-committee met at the Treasurer's office at the close of business, November 30, and counted the cash on hand. They subsequently submitted the following report :—

City of Cambridge, Dec. 11, 1888.

To the Committee on Finance :—

The sub-committee appointed to count and examine the cash in the hands of the Treasurer at the close of business on Nov. 30, 1888 would respectfully report :—

Nov. 30, 1888. Actual cash in Treasurer's office		$2,363 70
A certificate from W. A. Bullard, Cashier of First National Bank, showing a balance, to the credit of the Treasurer, of .	$294,716 06	
From this balance should be deducted five (5) checks given by the Treasurer, prior to November 30, but not received at the Bank, amounting to	$50,771 27	
Leaving a balance in Bank, as shown by the Treasurer's books, of		$243,944 79
Making the total of cash on hand . , . .		$246,308 49
Dec. 11, 1888. After certain additional entries were made belonging to the financial year of 1888, your committee found receipts and expenditures as follows :—		
Receipts :—		
From the Commonwealth — Corporation Tax	$45,618 56	
From the Commonwealth—State Aid . .	10,844 00	
From the Commonwealth—National Bank Tax	16,806 83	
From the Commonwealth—Pauper accounts	160 92	
Total . . . . , ...		$73,430 31
Which amounts added to the Treasurer's balance of Nov. 30th, 1888, make a total of		$319,738 80
Amount carried forward		$319,738 80

Amount brought forward		$319,738 80
Expenditures :—		
Authorized additional payments as of November 30, and verified by the Auditor's books as follows :		
William E. Rose	$618 75	
Amount due and paid the Commissioners of the Sinking Fund for the year	51,145 00	
Pay Roll for the last five (5) days of November	4,693 54	
State Tax	70,110 00	
National Bank Tax	5,804 11	
Surplus in running account of the Water Works, paid to the Trustees of the Water Loan Sinking Fund	7,424 42	
		$139,795 82
Showing a balance of cash in the Treasurer's hands as of Nov. 30, 1888, of		$179,942 98

Your Committee would further state that so far as it was possible, their figures have been verified by an examination of the Auditor's books.

Respectfully submitted,

FRANK H. TEELE,
GEORGE E. CARTER,
EDWARD C. WHEELER.

Accompanying this report was the following certificate of deposit.

FIRST NATIONAL BANK.

CAMBRIDGEPORT, Mass., Nov, 30, 1888

W. W. Dallinger, Esq., Treasurer, City of Cambridge.

DEAR SIR : —

The balance standing to your credit on the books of this Bank at the close of business today is Two Hundred Ninety-four Thousand Seven Hundred Sixteen and Six-hundredths Dollars ($294,716.06).

Respectfully yours,

W. A. BULLARD,
Cashier.

By the foregoing report it appears that the actual cash balance in the Treasurer's hands as of Nov. 30, 1888, was	$179,942 98	
This balance is subject to the following deductions :—		
Unpaid bills of November draft, approved, and payable in December, 1888	$33,838 96	
Balance unexpended from sale of Harvard Bridge Bonds	$61,770 62	
Sewer Bonds	106 35	
Fresh Pond Loan	1,268 78	
Stony Brook Loan	15,403 23	
		$78,548 98
Balance unexpended on account of contracts begun and not completed	$22,319 66	
		$134,707 60
Net balance in Treasury per Auditor's account		$45,235 38

The following tables are compiled from the assessors' books, and do not include subsequent changes by abatements and additional assessments: —

Polls and Valuation of Polls and Estates, May 1, 1886.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total, Real and Personal	Dwellings.	Total Tax.
1	2,703¾	$5,407 00	$7,426,980	$11,455,400	$18,882,380	1,842	$288,642 70
2..........	4,672½	9,345 00	3,132,390	11,403,700	14,536,090	2,507	227,386 35
3..........	3,197¼	6,394 50	1,403,200	7,134,700	8,537,900	1,432	134,463 00
4..	4,188¼	8,376 50	1,576,300	9,293,200	10,869,500	2,492	171,419 00
5..........	1,773	3,546 00	951,600	5,668,200	6,619,800	1,125	102,843 00
Total....	16,534½	$33,069 00	$14,490,470	$44,955,200	$59,445,670	9,398	$924,754 05

Polls and Valuation of Polls and Estates, May 1, 1887.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total, Real and Personal	Houses	Total Tax.
1..........	2,736	$5,472 00	$5,954,510	$11,800,000	$17,754,510	1,933	$289,544 16
2....	4,857½	9,715 00	3,280,290	11,680,900	14,961,190	2,604¾	249,094 04
3	3,281½	6,563 00	1,403,110	7,298,000	8,701,110	1,446	145,780 76
4..........	4,330½	8,661 00	1,677,400	9,576,000	11,253,400	2,611	188,715 40
5..........	1,899½	3,799 00	995,000	5,987,600	6,982,600	1,167	115,520 60
Total...	17,105	$34,210 00	$13 310,310	$46,342,500	$59,652,810	9,761	$988,654 96

Polls and Valuation of Polls and Estates, May 1, 1888.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total, Real and Personal	Dwellings.	Total Tax.
1..........	2,859¾	$5,719 50	$6,417,715	$12,581,600	$18,999,315	1,981	$290,709 22½
2..........	5,035¾	10,071 50	3,485,715	11,912,700	15,398,415	2,629	241,047 72½
3..........	3,295¾	6,591 50	1,456,110	7,506,500	8,962,610	1.461	141,030 65
4..........	4,489	8,978 00	1,782,900	9,779,800	11,562,700	2,621	182,418 50
5..........	1,878½	3,757 00	1,099,200	6,427,800	7,527,000	1,235	116,662 00
Total....	17,558½	$35,117 50	$14,241,640	$48,208,400	$62,450,040	9,927	$971,868 10

N. B.—The amount of the non-resident Bank Tax and the tax upon supplementary warrants are not included in the amounts stated as the total tax for the several years above mentioned. The valuation of the property assessed in the supplementary warrants for these years is not added to the total valuations as above given.

The valuations of estates in this city, for the years 1886, 1887 and 1888, as hereinbefore given, are the same as originally made by the board of assessors, during those years, and the same figures were reported by that board to the Tax Commissioners for each of the years, respectively. These tables are made up from the assessors' books, and have been verified by them and pronounced correct. These valuations were subject to changes in each year, after such report was made as shown by the following statement:—

Original valuation as of May 1, 1886 .	$59,445,670 00	
Abatement upon valuation to Dec. 31, 1886, (less amount of additional valuations)	1,179,054 00	
Net valuation to Dec. 31, 1886, as reduced by abatements		$58,266,616 00
Original valuation as of May 1, 1887 .	59,652,810 00	
Abatement upon valuation to Dec. 31, 1887, less amount of additional valuations	908,580 00	
Net valuation to Dec. 31, 1887, as reduced by abatements		58,744,230 00

Original valuation as of May 1, 1888 .	62,450,040 00	
Abatement upon valuations to Dec. 31, 1888, less amount of additional valuations	225,200 00	
Net valuation to Dec. 31, 1888, as reduced by abatements		61,206,461 00
Average net valuation for 1886, 1887 and 1888		$59,405,769 00

This last sum represents the amount upon which the limit of the rate of taxation, and also of municipal indebtedness, is fixed under the provisions of chapter 312 of the Acts of the year 1885.

Following is a statement showing the actual gain in the year 1888, in the polls, valuations and dwellings, after making the necessary corrections in the assessors' tables hereinbefore given.

There were 175 additional polls at $2.00 each, and 1,412 additional (of women) at 50 cents each, or 353 at $2.00 each, making the total additions 528 at $2.00, and the whole number of polls, 18,086¾.

Years.	Polls.	Net Valuation.	Dwellings.
1888..	18,086¾	$61,292,221	9,927
1887..	17,139¼	58,755,002	9,761
Increase..........................	947½	$2,537,219	166

It appears from the foregoing statement that there was a large increase of the valuation in the year 1888, and that the amount abated therefrom was also exceptionally large — the largest that has been made since the year 1876. The valuation of polls and estates is not yet up to the highest point ever reached in this city, that of the year 1875, when the amount returned by the assessors as of

May 1, 1875 was	$66,623,014 00
The abatements for the same year were very large, representing valuations to the amount of	1,968,555 00
Balance, net valuation in 1875	$64,654,459 00

If the average annual increase of the valuation should continue to be maintained, the amount reached within the next two years will be upwards of $65,500,000.00, or nearly $1,000,000.00 in excess of the figures reached in the year 1875.

The increase of valuation in the last three years was as follows: —

In 1886	$3,774,589 00
In 1887	473,053 00
In 1888	2,541,219 00
Total increase in three years	$6,788,861 00
Average increase per year in 1886, 1887 and 1888	$2,262,954 00

Following is a comparative statement of the amounts assessed upon polls and valuations, and for the non-resident bank tax as of May 1, in the years 1887 and 1888, respectively:—

In 1887.	Polls and valuation tax	$988,654 95	
	Non-resident bank tax	6,428 64	
	Additional warrants	881 30	
	Total tax assessed in 1887		$995,964 00
In 1888.	Polls and valuation tax	$971,829 50	
	Non-resident bank tax	5,895 00	
	Additional warrants	5,065 50	
	Total tax assessed in 1888		$982,829 50
	Decrease in assessment of taxes in 1888		$13,134 50

It appears by the foregoing, that notwithstanding the increased expenditure in the year 1888, over that of the previous year, the amount of the tax levy was $13,134.50 less than in the year 1887.

By reason of the large increase of the polls and valuations as hereinbefore shown, the assessors were enabled to reduce the tax-rate to $15.00 per $1,000.00 this being $1.00 less than the rate of the previous year. The discount of three per cent upon taxes paid prior to Oct. 10, as authorized by the city ordinance, further reduced the rate upon taxes so paid to $14.55 per $1,000.00. By an ordinance passed in the year 1887, interest at the rate of six per cent is charged upon all taxes unpaid after November 1.

A general appraisal of city property is made in each year by the board of assessors, and a return thereof is made by that board to the tax Commissioner of this Commonwealth. The following is a copy of the return for the year 1888, omitting items relating to the water works property.

GENERAL APPRAISAL OF CITY PROPERTY, AS OF MAY 1, 1888.

Cemeteries	$79,750 00
Fire apparatus	76,000 00
School houses and lands	716,000 00
Other public buildings and public grounds (Parks, etc.)	412,000 00
Trust Funds	10,778 71
City Sinking Funds	428,564 59
Other assets (uncollected taxes, assessments, etc.)	150,000 00
Total	$1,873,690 00
The amount of the bonded debt of the city, Nov. 30, 1888, as reported by the Auditor of Accounts, was	$1,899,000 00

The account of the city debt being made up to Nov. 30, includes within it the sum of $283,000, — being for bonds issued for the Harvard Bridge and City Hall land, neither of which is included in the appraisal made by the assessors.

The large areas of land given to the city by Mr. Frederick H. Rindge, and the land purchased for a City Hall site are also omitted from this appraisal.

As has been stated in previous annual reports of the Committee on Finance, this annual appraisal is not made for the purpose of making any offset of assets against liabilities, but only for the purpose of showing that the city debt represents actual and tangible property, having a positive value in use for the purposes to which it is dedicated.

No note can be taken, nor estimate made of the actual worth to the city of its numerous streets, aggregating in length upwards of ninety miles, — nor of the vast and constantly increasing network of sewers, extending through more than eighty miles of these streets, and mapped into numerous districts by the City Engineer. The value of these streets and sewers based upon their use, is beyond estimate; their actual cost within the last twenty years, as shown by the annual department reports, was about three and one-half millions of dollars. The aggregate expenditure for the street department for the past ten years exceeded a million dollars, while that of the sewer department was about three hundred and fifty thousand dollars. The expenditure in these departments during the ten years, from 1869 to 1878 inclusive, was two and one-half millions.

The Commissioners of the Sinking Funds report that the amount required to be raised for that board

In 1889, is	$61,875 00
In 1888, it was	51,145 00
Increase	$10,640 00

This increase is occasioned by the addition of the sum of $283,000 to the city bonded debt during the year 1888.

The demands for larger appropriations, made by several of the city departments at the beginning of the year, were not less urgent than those made in the previous year. Favorable action was taken upon most of these requests.

The sum of $20,000 was appropriated for the purchase of additional land situated on Broadway and Felton streets, adjoining the lot given to the city by Mr. Frederick H. Rindge, and originally selected as a site for the proposed English High School building. The sum named was to be met by a city debt, and the creation of such debt was authorized for the purpose stated. The purchase of the land before-mentioned was rendered unnecessary, by reason of the selection by Mr. Rindge of another lot as a school-house site, and the authorized bonds were not issued.

Upon the recommendation of this committee various additional appropriations were made from time to time during the year, included in which were the following: —

Incidental Expenses: Bath-house on the north side of Charles river, near the River Street bridge	$2,000 00
Filling the Mill Pond basin, River Street	2,000 00
*City Hall Lands: Land selected as a City Hall site on Main, Bigelow, and Inman Streets	94,000 00
Amount carried forward	$98,000 00

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* This is the amount originally appropriated, as shown in preceding pages of this report.

Amount brought forward	$98,000 00
Harvard Bridge: Additional for the construction of the bridge	100,000 00
Street Department: Front Street widening and extension	66,000 00
Street Department: Widening of Inman Street	2,600 00
Street Department: Widening of Main Street, near Inman street	1,659 00
Sewers: Construction, Front Street sewer	5,000 00
Total additional appropriations made subsequent to those reported in February, 1888	$173,259 00

Of the foregoing items, the sums appropriated for the Harvard Bridge and the extension of Front Street, were provided for by the city debt, created by authority of the following act of the year 1888:—

[CHAP. 73]

AN ACT TO AUTHORIZE THE CITY OF CAMBRIDGE TO BORROW MONEY IN EXCESS OF THE LIMIT ALLOWED BY LAW.

Be it enacted, etc., as follows:

SECT. 1. The City of Cambridge, in order to defray its share of the cost of building the bridge over Charles river, authorized and required by chapter two hundred and eighty-two of the acts of the year eighteen hundred and eighty-seven, is authorized to raise not exceeding two hundred thousand dollars, by loan, in excess of the limit allowed by law.

SECT. 2. This act shall take effect upon its passage. [*Approved February* 29, 1888.

The appropriations for City Hall Lands and for a sewer in Front Street, are provided for, by the creation of a city debt, under heretofore existing laws, relating to municipal indebtedness. Such of the remaining items specially appropriated as aforesaid, as have been paid, were met from surplus revenue.

Those that are unpaid will go over, to be provided for in the appropriations of the next year, from the surplus reserved for that purpose.

The subject of the erection of an English High School building, was before the committee during the year, and an order reported, authorizing the Committee on Public Property to procure plans for a building with a capacity for 550 to 600 pupils, and costing $90,000. No appropriation was made for the purpose, and the matter will therefore go over to be considered by the next City Council.

This committee has also had under consideration the matter of the proposed widening of the draws of four bridges over the Charles River, under the requirement of the following Act of the year 1888.

AN ACT REQUIRING THE CITIES OF BOSTON AND CAMBRIDGE AND THE BOSTON AND ALBANY RAILROAD COMPANY TO WIDEN THE DRAWS IN CERTAIN BRIDGES ACROSS CHARLES RIVER.

Be it enacted, etc., as follows:

SECT. 1. The cities of Boston and Cambridge shall before the first day of May in the year eighteen hundred and eighty-nine, subject to the provisions of chapter nineteen of the Public Statutes, widen the draws in the several highway bridges across Charles River at Brookline Street, River Street, Western Avenue and Boylston Street, so called and the Boston and Albany Railroad Company shall forthwith, subject to the provisions of said chapter nineteen, widen the draw in its railroad bridge across said river on the easterly side of the aforesaid Brookline Street Bridge, so that each of said draws shall have a clear opening of at least thirty-six feet in width.

SECT. 2. This act shall take effect upon its passage. [*Approved April* 16, 1888.]

The matter of widening the draws of the four bridges named in the foregoing act, came before this committee in the latter part of the year by reference of a report and order from the Committee on Roads and Bridges.

The estimated cost to this city of widening these draws is $15,400. The city engineers of the two cities having reported that the time allowed for this work is insufficient, the mayors of the two cities have been authorized by the City Councils of Boston and Cambridge respectively, to join in a petition to the General Court for an extension of the time.

The subject of providing ways and means to meet the expense necessary to be incurred under the act before recited, was referred to the next City Council. This item of expense will be included in the appropriations for the next year.

The fund for the "perpetual care of lots in the Cambridge Cemetery" has had accessions during the past year, in all amounting to $2,782.52.

The net amount of this fund as of Nov. 30, 1887, was . .	$10,778 71
Amount paid into the city treasury for this purpose in the year 1888, is	2,400 00
Amount of interest accumulations on portions of the fund on deposit in two savings-banks	380 52
Total amount of fund Nov. 30, 1888	$13,559 23

This fund is invested as follows: —

One City of Cambridge Water Bond, dated Nov. 1, 1886, payable in twenty years, with interest semi-annually at 3½ per cent	$7,000 00
One City of Cambridge Water Bond, dated Nov. 1, 1887, payable in twenty years, with interest semi-annually at 4 per cent	2,000 00
Amount on deposit in Cambridge Savings Bank	978 50
Amount on deposit in Cambridgeport Savings Bank	1,180 73
Amount deposited in Cambridgeport Savings Bank	2,400 00
	13,559 23

The remaining trust funds assumed by the city are the following: —

Dowse Institute Fund	$10,000 00
Sanders Temperance Fund	10,000 00
Daniel White Charity	5,000 00
Total	$25,000 00

Interest, at the rate of six per cent annually, is paid upon all these funds as follows: —

To the Trustees of the Dowse Institute	$600 00
To the Missionary of the Sanders Fund	600 00
To the Trustees of the Daniel White Charity	300 00
Total	$1,500 00

In the foregoing pages the various financial transactions of the past year have been reviewed as concisely as possible, and such figures presented as are believed to be of interest to the tax-payers of the city. Its financial condition at the close of the previous year was gratifying to all having an interest in the public welfare, and it is not less so at the present time.

In making up the usual estimates of the ways and means for the year, this committee was obliged by reason of the largeness of the appropriations asked for by some of the departments, and the narrow margin of our tax-limit, to figure closely in reference to the sum which could be raised by taxation, for the ordinary purposes of the city. The somewhat unexpected increase in the valuation of real and personal estate not only dispelled any fear that may have been entertained of a too close approach to the legal limit of taxation, but also enabled the assessors to make a reduction of $1.00 per $1,000 from the tax-rate of the previous year. The unanticipated surplus revenue was also of timely assistance in the necessary reënforcement, on various occasions, of some of the principal appropriations. Several important improvements in street widenings and extensions were begun and completed, and either paid for within the year, or amply provided for, to be met in the coming year out of funds reserved for the purpose and now in the treasury. Except for extraordinary purposes, such as the construction of the Harvard Bridge, and carrying forward street widenings and extensions in connection with that enterprise, — and the purchase of land for the new City Hall, — there has been no increase of the city debt.

As the sum of all, it may be said that this committee has endeavored to adhere to the financial policy outlined in this city several years ago, and the results that have followed are a sufficient reward for the efforts that have been made in that direction.

WILLIAM E. RUSSELL,
S. S. SLEEPER,
JOHN H. CORCORAN,
FRANK H. TEELE,
ALVIN F. SORTWELL,
FRANKLIN W. HAYNES,
GEORGE E. CARTER,
EDWARD C. WHEELER.
JOHN E. PARRY,
JOHN S. CLARY,

Committee on Finance.

REPORT

OF

THE CITY TREASURER.

Office of City Treasurer, Dec. 1, 1888.

To the Honorable the City Council:—

I have the honor to present herewith the annual report of the City Treasurer for the year ending November 30, 1888.

Said report shows that the cash balance on hand in the treasury November 30, 1887, was	$168,787 29
The amount received during the year ending November 30, 1888, from all sources, was	2,356,914 17
	$2,525,701 46
The authorized payments during the year were	2,345,758 48
Leaving a balance in the treasury, November 30, 1888, of .	$179,942 98

Very respectfully,

WM. W. DALLINGER, *City Treasurer.*

CITY OF CAMBRIDGE IN ACCOUNT CURRENT FROM DEC. 1, 1887, TO

Dr.

To authorized payments charged to City Accounts as follows:

Abatements (Taxes)	$21,532 79
Bridge (Harvard)	121,418 26
Bridges	2,781 63
Bridges, (West Boston, Craigie's and Prison Point)	5,528 80
Cambridge Cemetery	15,264 98
Cambridge Public Library	6,885 59
Cambridge Cemetery (Receiving Tomb)	3,881 57
Cambridge Public Library (Trust Fund)	1,000 00
Cemetery Fund	2,400 00
City Buildings (Care and Repairs)	11,348 11
City Hall Land	93,524 67
Discounts (Taxes)	25,366 53
Engineering	8,690 52
Fire Department	54,445 29
Fire Department (New Building, Ward Two)	7,636 64
Health Department	3,062 62
Incidental Expenses	31,877 18
Interest	106,982 69
Interest on Water Loan	89,765 00
Lighting Streets	40,834 40
Loan, Temporary	400,000 00
Loan, Water	175,000 00
Pauper Department	28,993 29
Pauper Department (Almshouse)	26,575 98
Pauper Department (Almshouse, New Building)	5,488 31
Pauper Department (House Offal)	17,712 69
Police Department	87,146 00
Salaries	26,900 00
School Department (Drawing Schools)	1,403 07
School Department (Evening Schools)	854 50
School Department (Incidental Expenses	599 41
School Department (Salaries)	175,773 80
School Department (Text Books and Stationery)	9,203 53
School Department (Industrial School)	411 59
School-houses (Care and Repairs)	36,449 48
School-houses (New and Furniture, Peabody)	5,300 00
School-houses (New and Furniture)	498 25
School-houses (New and Furniture, Putnam Completion)	10,454 74
School-houses (Land, Linnæan Street)	6,825 00
School-houses (Land, High School)	100 00
School-houses (Webster School Plumbing)	2,029 87
Sewers (Construction)	20,988 25
Sewers (Construction, Front Street)	388 60
Sewers (Construction, Bath Street)	12,572 51
Sewers (Maintenance)	28,333 24
Shade Trees and Public Grounds	4,670 06
Sinking Funds	51,145 00
Sinking Funds of Water Works	56,999 42
State Aid	11,851 90
Stationery and Printing	3,970 00
Street Department (Paving)	16,097 91
Street Department (Paving Main Street)	18,239 88
Street Department (North River Flagging Stone)	1,113 26
Street Department (Repairs)	104,002 13
Street Department (Repairs, Sea Wall)	3,426 60
Street Department (Watering)	16,259 37
Street Department (Widening Main Street)	504 87
Street Department (Widening Front Street)	34,488 45
Street Department (Extension Winsor Street)	5,554 73
Street Department (Widening Inman Street)	1,150 00
Street Department (Extension De Wolfe Street)	200 00
Street Department (Extension Charles River Street)	100 00
Tax (County)	39,342 40
Tax (Lien Account)	518 08
Tax (National Bank)	5,804 11
Tax (State)	70,110 00
Water Works (Abatements, Rates, Fines, etc.)	3,842 78
Water Works (Abatements Supplies)	33 65
Water Works (Construction)	24,656 02
Water Works (Construction, Fresh Pond)	15,400 57
Water Works Construction, Stony Brook)	74,683 77
Water Works (Refunds, Rates, Fines, etc.)	1,948 18
Water Works (Maintenance)	40,186 56
Water Works (Rates, Fines, etc.)	54 55
Water Works (Supplies)	5.174 85
Total Payments	$2,345,758 48
Cash balance in Treasury, Nov. 30, 1888	179,942 98
	$2,525,701 46

Nov. 30, 1888, (inclusive) with Wm. W. Dallinger, *City Treasurer.*

Cr.

Bridge (Harvard)	7,395 00
Bridges, (West Boston, Craigie's and Prison Point)	387 81
Cambridge Cemetery	11,618 24
Cambridge Public Library	4,517 12
Cemetery Fund	2,400 00
City Buildings (Care and Repairs)	1,980 72
City Lands	7,228 80
City Hall Land	10,489 85
Engineering	1,010 00
Fire Department	1,191 73
Incidental Expenses	4,358 50
Interest	7,590 98
Interest on Water Loan	228 00
Lighting Streets	113 19
Loan (City Hall Land)	83,000 00
Loan (Harvard Bridge)	200,000 00
Loan (Temporary)	400.000 00
Loan (Water)	73,000 00
Notes Receivable	1,303 94
Pauper Department	3,952 42
Pauper Department (Almshouse)	10,894 56
Pauper Department (House Offal)	6,721 50
Police Department	5,962 99
School Department (Salaries)	1,033 11
School Department (Text Books and Stationery)	249 11
Sewers (Construction)	16,573 52
Sewers (Construction, Bath Street)	30 00
Sewers (Maintenance)	1,904 80
Shade Trees and Public Grounds	108 58
State Aid	10,979 50
Street Department (Paving)	6,151 37
Street Department (Repairs)	2,061 49
Street Department (Watering)	12,052 84
Street Department (Widening Front Street)	3,500 00
Street Department (Widening)	644 00
Tax (Corporation)	51,289 26
Tax (Lien Account)	166 76
Tax (National Bank)	16,887 57
Taxes, 1881	4 00
Taxes, 1882	16 00
Taxes, 1883	180 00
Taxes, 1884	315 36
Taxes, 1885	581 05
Taxes, 1886	4,028 50
Taxes, 1887	71,272 80
Taxes, 1888	909,639 50
Trustees of Water Loan Sinking Fund	175.000 00
Water Works (Construction)	620 00
Water Works (Construction, Fresh Pond)	62 65
Water Works (Construction, Stony Brook)	2,377 00
Water Works (Rates, Fines, etc.)	217,656 73
Water Works (Supplies)	6,183 32
Total receipts	$2,356,914 17
Cash balance in the Treasury, Nov. 30, 1887	168,787 29
	$2,525,701 46

Wm. W. Dallinger, *City Treasurer.*

REPORT

OF THE

COMMISSIONERS OF THE SINKING FUNDS OF THE CITY OF CAMBRIDGE.

To the Honorable the City Council:—

THE undersigned, Commissioners of the Sinking Funds of the City, herewith present their thirteenth annual report for the year ending Nov. 30, 1888.

Dr.

Amount of the funds Nov. 30, 1887	428,564 59	
Amount received from the City of Cambridge, derived from taxation	51,145 00	
Amount of interest received on investments .	21,159 50	
		500,869 09

Cr.

Amount paid as accrued interest on bonds purchased for investment	214 56	
Amount paid as premium on bonds purchased for investment	686 25	
		900 81
Amount of the funds Nov. 30, 1888, all securities taken at par		499,968 28

SECURITIES BELONGING TO THE SINKING FUNDS, NOV. 30, 1888.

Cambridge Water Loan, six per cent bonds, maturing July 1, 1892	1,000 00
Cambridge Paving Loan, six per cent bonds, maturing July 1, 1893	16,000 00
Cambridge Paving Loan, six per cent bonds, maturing July 1, 1894	1,000 00
Cambridge Sewer Loan, six per cent bonds, maturing July 1, 1896	11,000 00
Cambridge Street Widening Loan, six per cent bonds, maturing July 1, 1904	90,000 00
Amount carried forward	$119,000 00

Amount brought forward	$119,000 00	
Cambridge Sewer Loan, six per cent bonds, maturing July 1, 1904	2,000 00	
Cambridge Street Widening Loan, six per cent bonds, maturing July 1, 1905	14,000 00	
Cambridge Sewer Loan, six per cent bonds, maturing July 1, 1905	49,000 00	
		184,000 00
City of Charlestown, six per cent bonds, maturing Jan. 1, 1889	3,000 00	
Town of Brookline, $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1889	9,000 00	
Town of Southboro, four per cent bonds, maturing March 25, 1889	2,000 00	
Town of Brookline, four per cent bonds, maturing May 1, 1889	10,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1889	2,000 00	
Town of Brookline. $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1890	10,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1890	2,000 00	
Town of Brookline, $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1891	7,000 00	
City of Cleveland, four per cent bonds, maturing Oct. 1, 1891	14,000 00	
City of Dayton, five per cent bonds, maturing Nov. 1, 1891	2,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1891	2,000 00	
Town of Brookline, $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1892	9,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1892	2,000 00	
Town of Brookline, $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1893	8,000 00	
City of Cleveland, four per cent bonds, maturing April 1, 1893	2,000 00	
Town of Brookline, four per cent bonds, maturing July 1, 1893	3,000 00	
City of Cleveland, four per cent bonds, maturing Oct. 1, 1893	3,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1893	2,000 00	
Town of Brookline, $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1894	7,000 00	
Town of Brookline, four per cent bonds, maturing July 1, 1894	3,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1894	2,000 00	
Amount carried forward	$104,000 00	$184,000 00

Amount brought forward	$104,000 00	$184,000 00
City of Fitchburg, four per cent bonds, maturing Nov. 1, 1894	3,500 00	
Town of Brookline, $3\frac{65}{100}$ per cent bonds, maturing Feb. 1, 1895	1,000 00	
City of Dayton, Ohio, four per cent bonds, maturing Oct. 1, 1895	7,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1895	2,000 00	
City of Dayton, Ohio, four per cent bonds, maturing Oct. 1, 1896	7,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1896	2,000 00	
City of Fitchburg, four per cent bonds, maturing Nov. 1, 1896	2,000 00	
City of Waltham, four per cent bonds, maturing Jan. 1, 1897	6,000 00	
City of New Bedford 3½ per cent registered bond maturing April 1, 1897	15,000 00	
City of Dayton, Ohio, four per cent bonds, maturing Oct. 1, 1897	7,000 00	
Town of Hyde Park, four per cent bonds, maturing Nov. 1, 1897	2,000 00	
City of Fitchburg, 3½ per cent registered bond, maturing April 1, 1898	10,000 00	
City of Cleveland, four per cent bonds, maturing Sept. 1, 1898	1,000 00	
City of Dayton, Ohio, four per cent bonds, maturing Oct. 1, 1898	4,000 00	
City of Providence, 4½ per cent bonds, maturing June 1, 1899	64,000 00	
City of Cleveland, $3\frac{65}{100}$ per cent bonds, maturing Sept. 1, 1902	1,000 00	
City of Lawrence, four per cent bonds, maturing July 1, 1904	12,000 00	
Town of Hopkinton, four per cent bonds, matering Sept, 30, 1904	5,000 00	
Town of Beverly, four per cent bonds, maturing July 1, 1911	9,000 00	
Note receivable due April 1, 1889, secured by collateral	51,000 00	
Cash in First National Bank of Cambridge	468 28	
		315,968 28
		$499,968 28

The bonded city debt, which the foregoing sinking funds are expected to pay matures as follows, viz : —

April 1, 1889, City Loan bonds, five per cent	$100,000 00
July 1, 1890, City Loan bonds, six per cent	20,000 00
July 1, 1893, City Loan bonds, five per cent gold	150,000 00
July 1, 1893, Land Loan bonds, six per cent	10,000 00
July 1, 1893, Paving Loan bonds, six per cent	100,000 00
July 1, 1893, Street Loan bonds, six per cent	13,000 00
July 1, 1894, Paving Loan bonds, six per cent	130,000 00
April 1, 1895, Municipal Loan bond, four per cent	200,000 00
July 1, 1895, Paving Loan bonds, six per cent	25,000 00
Oct. 1, 1895, Sewer Loan bonds six per cent	20,000 00
July 1, 1896, Sewer Loan bonds, six per cent	29,000 00
Nov. 1, 1896, Sewer Loan bonds, six per cent	25,000 00
Aug. 1, 1898, City Hall Land Loan bonds, four per cent	83,000 00
July 1, 1903, Sewer Loan bonds, six per cent	136,000 00
July 1, 1903, Street Widening Loan bonds, six per cent	10,000 00
July 1, 1904, Sewer Loan bonds, six per cent	295,000 00
July 1, 1904, Street Widening Loan bonds, six per cent	90,000 00
July 1, 1905, Sewer Loan bonds, six per cent	144,000 00
July 1, 1905, Street Widening Loan bonds, six per cent	14,000 00
Aug. 1, 1905, Cambridge Cemetery Extension Loan bond, four per cent	65,000 00
Nov. 1, 1907, Sewer Loan bond, four per cent	30,000 00
Oct. 1, 1917, Harvard Bridge Loan bond, four per cent	10,000 00
July 1, 1918, Harvard Bridge Loan bonds, four per cent	100,000 00
Sept. 1, 1918, Harvard Bridge Loan bonds, four per cent	50,000 00
Sept. 1, 1918, Harvard Bridge Loan bonds, (Front street) extension), four per cent	50,000 00
	$1,899,000 00

The city debt proper reached its minimum last year and for the first time since 1880 no portion of the debt matured the present year. New four per cent city bonds have been issued to the amount of $283,000.00, during the year, as follows, viz : $100,000.00 dated July 2d, 1888; $50,000.00 dated September 1st, 1888, both issues being for the new Harvard Bridge; $50,000.00 dated September 1st, 1888, on account of the Front street extension. All of the above are payable in thirty years from their respective dates. Also $83,000.00 on account of the new City Hall, Land Loan, dated August 1st, 1888 and payable in ten years from date. The funded debt of the city has increased by this amount $283,000.00 of bonds issued, and now amounts to $1,899,000.00, from which deducting the amount of the sinking fund assets at par, $499,968.28, leaves the net liability for city bonded debt, December 1st, 1888 (exclusive of water debt) $1,399,031.72. The amount of city bonds paid and cancelled on account of the city debt by this board since its organization in 1876 is $2,150,000.00. The present valuation of the city is $62,450,000.00. The fund has increased since our last report $71,403.69.

Respectfully submitted,

CHAS. H. SAUNDERS,
JOS. A. HOLMES,
FRANK A. ALLEN,
JOHN C. BULLARD,
GEO. H. HOWARD,
A. J. LOVELL,

Commissioners of the
Sinking Funds
of the
City of Cambridge.

Cambridge, Dec. 19, 1888.

REPORT

OF THE

TRUSTEES OF THE SINKING FUND OF THE CAMBRIDGE WATER WORKS.

To the Honorable the City Council :—

The undersigned, trustees of the Sinking Fund of the Cambridge Water Works, herewith submit their annual report of the fund committed by law to their charge: —

Dr.

The amount of the fund at the date of the last report, Nov. 30, 1887, was . , ...	$838,597 01	
Amount received from the City Treasurer of Cambridge, the same having been derived from the annual water rates, and being three per cent on the amount of outstanding Water loan bonds	49,575 00	
Amount of surplus received in the running accounts of the Water Works for the year ending Nov. 30, 1888	7,424 42	
Amount of interest received on investments . .	35,360 89	
Amount of premium received in the sale of securities	651 35	
		$931,608 67

Cr.

Amount paid the City Treasurer of Cambridge with which to meet the Water loan bonds which matured April 1, 1888	175,000 00	
Amount of interest paid the City of Cambridge, for advance payments to meet the maturing debt in 1887 and 1888	2,666 67	
Balance, representing the amount of the fund Nov. 30, 1888, all securities taken at par . . .	753,942 00	
		931,608 67

Securities belonging to the Sinking Fund, November 30th, 1888.

Cambridge Water Loan, six per cent bonds maturing May 1, 1889	$8,000 00	
Cambridge Water Loan, six per cent bonds, maturing July 1, 1890	31,000 00	
Cambridge Water Loan, six per cent bonds, maturing May 1, 1891	26,000 00	
Cambridge Water Loan, six per cent bonds, maturing July 1, 1892	1,000 00	
Cambridge Water Loan, four per cent bonds, maturing Nov. 1, 1894	6,000 00	
Cambridge Water Loan, six per cent bonds, maturing April 1, 1895	37,000 00	
Cambridge Water Loan, three and one-half per cent registered bonds, maturing after April 1, 1896	100,000 00	
Cambridge Water Loan, three and one-half per cent registered bonds, maturing after July 1, 1896	75,000 00	
Cambridge Water Loan, six per cent bonds, maturing July 1, 1896	46,000 00	
Cambridge Water Loan, six per cent bonds, maturing July 1, 1897	16,000 00	
Cambridge Water Loan, five per cent registered bond, maturing July 1, 1898	12,500 00	
Cambridge Contingent Loan, four per cent note, dated Dec. 1, 1883	200,000 00	
		$558,500 00
Town of Southboro, four per cent bonds, maturing March 25, 1890	6,000 00	
Town of Hyde Park, four per cent bonds, maturing July 1, 1891	5,000 00	
City of Salem, four per cent bonds, maturing July 1, 1892	17,000 00	
Town of Arlington, five per cent bonds, maturing July 1, 1898	24,000 00	
City of Boston, four per cent bonds, maturing Jan. 1, 1899	50,000 00	
City of Boston, four per cent bonds, maturing April 1, 1900	4,000 00	
City of Cleveland, O., three sixty-five one hundredths per cent bonds, maturing Sept. 1. 1902	3,000 00	
City of Providence, five per cent bonds, maturing July 1, 1906	50,000 00	
Town of Winchester, four per cent bonds, maturing May 1, 1908	10,000 00	
		$169,000 00
Amount carried forward		$727,500 00

Amount brought forward	$727,500 00
Cash in First National Bank of Cambridge on interest	26,442 00
	$753,942 00

The bonded water debt which the foregoing fund is expected to pay, matures as follows, viz : —

May 1, 1889, six per cent coupon	$112,000 00
July 1, 1890, six per cent coupon	60,000 00
May 1, 1891, six per cent coupon	50,000 00
July 1, 1892, six per cent coupon	335,000 00
April 1, 1894 six per cent coupon	150,000 00
Nov. 1, 1894, four per cent coupon	36,000 00
April 1, 1895, six per cent coupon	160,000 00
April 1, 1896,3½ per cent registered (or to April 1, 1911) . . .	100,000 00
July 1, 1896, six per cent coupon	103,000 00
July 1, 1896, 3½ per cent registered (or to July 1, 1911) . . .	75,000 00
July 1, 1897, six per cent coupon	16,000 00
July 1, 1898, five per cent registered.	12,500 00
Nov. 1, 1906, 3½ per cent registered	43,000 00
Oct. 1, 1907, four per cent registered	75,000 00
Oct. 1, 1907, four per cent registered	15,000 00
Nov. 1, 1907, four per cent registered	22,000 00
July 1, 1908, four per cent coupon	46,000 00
Aug. 1, 1908, four per cent coupon	25,000 00
May 1, 1910, four per cent registered	133,000 00
May 1, 1910, four per cent coupon	155,000 00
Total funded water debt	$1,723,500 00

As will be seen from the foregoing report, water bonds to the amount of $175,000.00 have matured and been paid. $73,000.00 in water bonds have been issued by the City Council, during the year. The net water debt is now $969,558.00 a reduction of $17,344.99 from the figures of one year ago.

Respectfully submitted,

WM. E. RUSSELL,
ALVIN F. SORTWELL,
WM. W. DALLINGER,
Trustees of the Sinking Fund of the Cambridge Water Works.

REPORT

OF THE

TRUSTEES OF THE DOWSE INSTITUTE.

CAMBRIDGE, Nov. 21, 1888.

To the Honorable City Council of Cambridge: —

THE Board of Trustees of the Dowse Institute respectfully reports that a course of six lectures, with one reading and a concert, was given in Union Hall, Cambridgeport, beginning Oct. 25, and closing Dec. 20, 1887.

An attested copy of the accounts of the Treasurer is herewith transmitted, showing the amount of receipts and expenditures.

W. W. WELLINGTON,
W. A. BULLARD,
FRANK A. ALLEN,
WILLIAM E. RUSSELL,
ALVIN F. SORTWELL.
Board of Trustees.

W. A. BULLARD, TREASURER, IN ACCOUNT WITH THE DOWSE INSTITUTE.

Dr.

To balance from last account	$296 45	
One year's interest on Fund	600 00	
Sales of tickets to course	689 50	
		$1,585 95

Cr.

By cash for a concert by Emma Juch Company .	$275 00	
“ paid Robert J. Burdett, for a lecture . .	100 00	
“ “ Sam. P. Jones, “ . .	250 00	
“ “ Rev. Joseph Cook, “ . .	125 00	
“ “ Geo. A. Sheriden, “ . .	75 00	
“ “ Henry A. Clapp, “ . .	75 00	
“ “ Rev. J. H. Vincent, “ . .	100 00	
“ “ Prof. J. W. Churchill, for reading .	100 00	
“ “ John Ford & Son, for printing . .	58 75	
“ “ Cambridge Tribune, for advertising	30 00	
“ “ Cambridge Chronicle, “	30 00	
“ “ Cambridge Press, “	20 00	
“ “ Cambridge News, “	18 00	
“ “ F. M. Buffum, distributing notices	12 00	
“ “ “ as doorkeeper . . .	8 00	
“ “ Geo. E. French, distributing notices	1 95	
“ “ F. L. Beunke, “	1 95	
“ “ Envelopes, stamped and addressed .	16 96	
“ “ Cambridge blue book	25	
“ “ Chas. L. Russell, doorkeeper . . .	8 00	
“ “ Albert Buffum, “ . . .	5 00	
“ “ Ralph Stevens, ticket seller . . .	8 00	
“ “ Union Hall Asso., rent of hall . .	265 00	
Balance	2 09	
		$1,585 95

ATTEST, W. A. BULLARD, *Treasurer.*

REPORT

OF THE

TRUSTEES OF THE BRIDGE CHARITABLE FUND.

To the Honorable City Council:—

THE Board of Trustees of the Bridge Charitable Fund respectfully submits the twelfth annual report of the condition of the fund.

The amount of the fund to Jan. 19, 1888, was	$2,344 91
Interest to July 19, 1888	46 89
Amount of fund July 19, 1888	$2,391 80
Deduct two thirds of the added interest as due to the Overseers of the Poor, under the provisions of the Sanders bequest	31 26
Actual amount of fund as of July 19, 1888	$2,360 54

The interest accumulations upon the fund payable from year to year to the Overseers of the Poor, have been withdrawn at various times and separately deposited in the Cambridgeport Savings Bank in the name of the Mayor as trustee for the Overseers of the Poor.

The amount actually on deposit to the credit of this fund with interest to July 19, 1888, added is $2,455.35. The overflow of interest on deposit to the credit of the Overseers of the Poor with its accrued interest is $312.90. The sum on deposit to the credit of this fund should be reduced by the withdrawal of the amount due the Overseers of the Poor January 18, 1888, viz: $63.55.

The interest has heretofore been computed to January 19 of the year following that for which the annual report is made. Inasmuch as the financial year of the city expires November 30, the report should show the state of the fund with the interest that has actually accrued, and this year's report is so made. The report for the next year should show the addition of the January and July interest.

There is nothing to add to the statements of former reports The history of the bequest has been given at various times, and may be found in city documents of past years.

WM. E. RUSSELL,
ALVIN F. SORTWELL, } *Trustees.*
EDW. W. HINCKS,

REPORT

OF THE

TRUSTEES OF THE SANDERS TEMPERANCE FUND.

To the Honorable City Council:—

The Trustees of the Sanders Temperance Fund respectfully submit their twenty-third annual report.

This board has continued in service the venerable missionary of the fund, Mr. Alonzo Stewart, who has labored for many years with discretion and zeal for "the cause of temperance, in reforming old drunkards and preventing young drunkards, and abolishing as far as possible the use of all intoxicating articles." His interest in the good work shows no abatement, notwithstanding his advanced age, and his exacting and laborious work in the cause seems in perfect harmony with the wishes of the donor of the bequest.

The fund continues to be represented by the authorized note of the City Treasurer for the sum of $10,000.00, payable to the Trustees. The interest upon this note, fixed at six per cent per annum, is paid to the missionary as his salary. The amount of the fund is held in the City Treasury, and accounted for at the end of each year, as one of the city trust funds.

WM. E. RUSSELL,
ALVIN F. SORTWELL,
C. F. STRATTON,
WILLIAM T. PIPER.
Trustees.

REPORT

OF THE

SANDERS TEMPERANCE FUND MISSIONARY.

To the Trustees of the Sanders Temperance Fund: —

Gentlemen: In closing the record of another year, with its responsibilities, which can end only with our mortal lives, and its influences, which will continue long after we have passed away, I am forcibly reminded that

> "Life is real, life is earnest,
> And the grave is not its goal."

But regrets and resolves will not bring back lost opportunities for aiding the unfortunate and the sinning: they only extort the sad lament, —

> "Oh, the good we all *might* do,
> As the days go gliding by."

This will avail but little, unless it stimulates us to more earnest efforts in the future, for "The mill will never grind with the water that has passed."

In prosecuting the work assigned me by the trustees of this noble fund, I have continued the labor of former years: devoting my time and energies to the reclaiming of the inebriate, and the saving of those whose feet have only *entered* the path that leads down to death.

I have made personal appeals to about twelve hundred persons, urging them to abandon the use of intoxicants in every form; I have solicited, and placed in the hands of the inmates of our jail and house of correction, nearly sixty thousand pages of religious and temperance literature; have taken pledges from more than fifty persons, and conducted religious services, on the Sabbath, in the women's department of the house of correction.

This year, like the last, has found me in such firm health as to need no change, so I have been able to remain at the post of duty for the entire year.

The no-license law has been of immense value in drying up the fountains from which spring the bitterest sorrows of this earth. While everything that a faithful city government could do has been done, yet it is impossible to turn back the waves of drunkenness which flow in upon us from our neighboring city.

We can only hope and pray for the time when Boston's licensed and unlicensed saloons shall be closed; then shall we see greater results from our efforts in our own loved Cambridge.

Respectfully submitted,

ALONZO STEWART,

Sanders Temperance Fund Missionary.

December 31, 1888.

REPORT

OF THE

OVERSEERS OF THE POOR OF CAMBRIDGE.

CAMBRIDGEPORT, December 26, 1888.

To the Honorable the City Council of the City of Cambridge: —

GENTLEMEN: The Board of Overseers of the Poor respectfully present their annual report for the year ending Nov. 30, 1888.

The membership of the Board has continued without change during the year.

Under the charter constituting the Board, Dr. Charles E. Vaughan was unanimously reëlected by the city council in April last for the term of five years.

Dr. Lewis L. Bryant, who was first chosen in 1883, as Assistant City Physician, was reëlected to that office in April last by the Board, and confirmed by the City Council. In his practice he has made 2,019 professional visits to 551 city patients outside of the almshouse since Nov. 30, 1887. Of this number 223 had a legal settlement in Cambridge, and 191 of them were born in this city. These 551 patients embraced 245 males, 306 females, and 200 children. There have been 17 women attended in childbirth outside of the almshouse; 29 persons have been attended at the police stations (25 males and 4 females); 10 patients have been sent to the hospital for treatment; 81 persons have been examined relative to insanity, and 52 have been sent to the State lunatic hospitals; 32 persons have died outside of the almshouse.

A roomy repository for medicines has been provided for Dr. Bryant, which will, it is hoped, enable him to keep in stock a large part of the medicines needed in his treatment of the poor.

It has been the custom of the Board to require all applicants for aid to give a clear statement of their residence, taxes, and all necessary evidence to determine their settlement and the necessity for relief. There are now 5,642 of these histories, embracing 16,926 persons, on file at the office of the Board; 505 of these history papers have been made within the past year, covering 1,515 persons (630 males, 885 females), 498 of whom were adults, 1,017 minors. Of these families 179 are settled in Cambridge, 113 in other cities and towns, and 213 are State paupers. There have been 28 histories revised, under the changes in the pauper laws, during the year.

The attention of the City Council was called in our last report to the need of a fire-proof receptacle for the exceedingly valuable histories, records, books, and other matter prepared at a great cost of time and money, and which have been steadily accumulating for more than ten years. Happily, there is a prospect that this great want will be supplied by a proper provision in the new City Hall.

The number of paupers supported by the city at the various institutions within the past year was as follows: —

City Almshouse	249
State Reform School	3
State Industrial School	2
State Lunatic Hospitals	113
State Almshouse	1
Middlesex House of Correction	9
Massachusetts School for Feeble Minded	3
	380

The expenditures for outside aid have been $29,283.35. Of this amount $15,213.39 has been expended for the 113 insane at the State hospitals, who have a legal settlement in Cambridge, against $12,744.70 last year. This is an increase of $2,468.69 in one year in the cost to the city for its insane poor. This number includes 33 at the Danvers Hospital, 48 at the Worcester Lunatic Hospital, 12 at the Worcester Insane Asylum, 3 at the Taunton Lunatic Hospital, 14 at the Westborough Insane Hospital, 1 in the insane ward of the State Almshouse at Tewksbury, 1 at the State Farm at Bridge-water, 1 at the Northampton Lunatic Hospital. There have been 45 new admissions the present year.

This very large sum would have been considerably increased but for the 25 cases of the mildly insane class cared for at the almshouse during the year, 13 of which were transferred from the State lunatic hospitals.

The plan of removing these mild cases from the State hospitals to the City Almshouse, after careful investigation, has been continued with advantage, especially under the present law which allows probation. If more of this class could be accommodated it would be a saving to the city, as they can be supported there with less expense than at the hospital.

The receipts for outside aid have been $3,952.42, leaving a net cost of $25,330.93 for the support of the poor outside of the almshouse. Of this amount $1,571.14 has been received from the relatives of insane persons supported by the city, and $1,296.23 has been reimbursed to the city from other cities and towns, and $1,047.83 from the State Treasury.

Almshouse.

The almshouse thrives under the able and judicious management of the Superintendent, Martin L. Eldridge, and Mrs. Eldridge, the matron. They are fortunate in an efficient and faithful staff of assistants.

Total number of inmates during the year	249
Total number present, Nov. 30, 1888	135
Average monthly number	130

The plan of affording work for the boys in seating chairs has been continued with very satisfactory results under the supervision of the Assistant Superintendent, Everett M. Higgins, whose influence over the boys is marked and of the best character. Several of the boys have received an allowance for the extra work they have performed.

The new two-story brick building has been completed during the year, and is now partially occupied.

The new building erected for laundry purposes has been occupied several months, and has proved very satisfactory.

The city authorities have caused a very commodious and convenient ambulance to be made, which is kept at East Cambridge, ready at all times to convey the sick and injured to the almshouse and the hospitals. The Overseers pay a fixed charge for this service.

The school at the almshouse has progressed to the satisfaction of the Board, under the faithful and intelligent charge of the teacher, Miss Alice H. Fawcett.

The chaplain, Rev. F. W. Holland, has continued his official duties during the year, rendering faithful service.

The superintendent of the almshouse, Martin L. Eldridge, states in his report that 121 inmates have been admitted during the year, 104 entered on permits from the secretary of the Board, and 17 were sentenced by the court. Six have been committed as neglected children. Eleven boys have been sentenced to the almshouse truant school during the year. They have been committed for a term of two years by the District Court of Cambridge. Under suitable circumstances this punishment is sometimes subsequently modified. Of the 249 inmates present within the year 174 were adults and 75 were minors. There have been 114 discharged, of whom 76 were males and 38 females.

Included in the total number of inmates present, Nov. 30, 1888, are 25 of the mildly insane class, 7 of whom are males and 18 females.

The assistant city physician reports 171 medical visits at the almshouse to 108 persons, 64 of whom were males and 44 females. There have been 13 deaths at the institution within the year. There were 12 patients present Nov. 30, 1888, in the almshouse hospital wards, 2 males and 10 females. Two women have been attended in childbirth at the institution during the year.

A schedule of personal property, as presented in detail by the superintendent, shows a valuation of $13,980.66.

The expenditures for the almshouse during the year have been $19,862.01, and the receipts have been $1,309.47, leaving a net cost of $18,552.54.

Under the statute nine children have been removed from the almshouse, and placed in families at a cost of nearly three dollars a week for each child.

Farm and Ledge.

The ground cultivated for the city farm has been more extensive than for many years, and with the efficient aid of the farmer, James Welch, has yielded the largest amount of produce ever known. A greatly increased revenue has been obtained from the sales of the products.

The force employed at the quarry, under the faithful charge of William Maloney, has been increased during the year, and the stone is readily sold to a greater number of purchasers. All able bodied men, who ask relief for themselves and families, are required to labor at the ledge in return for the aid given. The Overseers are still strongly in favor of reserving the ledge, as far as possible, for this latter class, — a policy which they have announced in former reports. They believe that by this method of giving relief they are encouraging an independent spirit which is unwilling to receive favors without giving some equivalent for them, and that this is of more real value than the small additional revenue which can be obtained by a different use of the ledge.

The expenditures for the farm and ledge have been during the year $6,278.78, and the receipts have been $9,585.09, leaving an excess of receipts above expenditures of $3,306.31.

House Offal.

The Overseers have continued their voluntary charge of this department.

The expenditures during the year have been $17,613.50, and the receipts have been $6,721.50. The net cost for the collection of the city offal has been $10,892.00, an increase of $2,326.30 over last year.

In comparing the past year with the preceding, an advance in net expenditure will be noticed, occurring mainly in the department of outside aid. This does not necessarily imply an increase in individual or family support, but is due to certain unavoidable causes.

I. The annual increase in the cost of the support of the insane, which is augmented by the law including dipsomaniacs.

II. The statute, rigidly administered by the State Board of Lunacy and Charity, requiring cities and towns to board in suitable homes outside the almshouse all children above the age of four years.

III. The law which forbids the admission of soldiers' families to the almshouse.

Other incidental causes might be mentioned, as the high cost of certain articles, especially coal.

The appropriation for expenditures, as made by the City Council for the financial year, was as follows: —

Pauper Department	$21,500 00
" " Almshouse	16,500 00
" " House Offal	11,500 00
	$49,500 00

The estimate revenued was: —

Pauper Department	$4,000 00
" " Almshouse	6,500 00
" " House Offal	6,000 00
	$16,500 00

We append, as a part of our report, the reports of the superintendent of the almshouse and the assistant city physician, which contain matters which are of interest and value to the public.

Recapitulation.

Total expenditures, outside aid	$29,283 35
Total receipts	3,952 42
Net cost	25,330 93
Total expenditures, almshouse, farm and ledge	26,140 79
Total receipts	10,894 56
Net cost	15,246 23
Total expenditures, exclusive of house offal	55,424 14
Total receipts	14,846 98
Net cost of care of the poor	40,577 16

Respectfully submitted,

WM. E. RUSSELL,
CHAS. E. VAUGHAN,
HENRY A. DOHERTY,
SUMNER ALBEE,
MICHAEL CORCORAN,
CHARLES WALKER.
} *Overseers of the Poor.*

REPORT

OF THE

SUPERINTENDENT OF THE ALMSHOUSE.

CAMBRIDGE, Dec. 1, 1888.

To the Overseers of the Poor: —

GENTLEMEN: I herewith respectfully submit the annual report of the Almshouse for the year ending Nov. 30, 1888.

The whole number of persons in the Almshouse during the year was as follows:

Males	154
Females	95
Total	249
Adults	174
Minors	75
Whole number in the Almshouse Nov. 30, 1888.	135
Average number during the year	130

The following tables will show the admissions, discharges and deaths for the year: —

Table I,

Showing the number and sex of adult persons and minors of all classes received into the Almshouse in each month of the year ending Nov. 30, 1888.

Months.	Adults.		Minors.		Total.	Neglected Children.		Pauper Children.		Truant Children.	
	M.	*F.*	*M.*	*F.*		*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
1887 December........	3	2	0	0	5	0	0	0	0	0	0
1888 January..........	5	1	0	0	6	0	0	0	0	0	0
February.......	6	0	3	4	13	0	1	1	3	2	0
March............	2	2	3	1	8	0	0	1	1	2	0
April.............	5	2	2	4	13	0	0	2	4	0	0
May...............	8	2	1	1	12	0	0	0	1	1	0
June..............	2	2	2	4	10	0	0	1	4	1	0
July..............	9	0	5	2	16	3	2	2	0	0	0
August...........	4	0	0	2	6	0	0	0	2	0	0
September.......	3	2	1	0	6	0	0	0	0	1	0
October..........	7	4	6	0	17	0	0	2	0	4	0
November........	2	5	2	0	9	0	0	2	0	0	0
Totals.	56	22	25	18	121	3	3	11	15	11	0

Table II,

Showing the number and sex of adult persons and minors of all classes discharged from the Almshouse in each month of the year ending Nov. 30, 1888.

Months.	Adults.		Minors.		Total.	Neglected Children.		Pauper Children.		Truant Children.	
1887	*M.*	*F.*	*M.*	*F.*		*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
December........	2	2	2	0	6	0	0	1	0	1	0
1888											
January...... ...	3	3	1	0	7	0	0	0	0	1	0
February	5	1	1	4	11	0	0	1	4	0	0
March	4	3	4	0	11	0	0	1	0	3	0
April	9	2	0	1	12	0	0	0	1	0	0
May..............	12	4	2	3	21	0	0	0	3	2	0
June...............	1	1	1	1	4	0	0	0	1	1	0
July......	6	3	0	0	9	0	0	0	0	0	0
August...........	1	0	1	3	5	0	0	1	3	0	0
September	4	2	3	2	11	2	0	0	2	1	0
October..........	4	2	3	0	9	0	0	1	0	2	0
November........	5	1	2	0	8	0	0	2	0	0	0
Totals........	56	24	20	14	114	2	0	7	14	11	0

Table III,

Showing the name, age, time of admission, date and cause of death of each person who died in the Almshouse during the year ending Nov. 30, 1888.

Names.	Age.	Date of Admission.	Date of Death.	Cause of Death
Benjamin Stones.......	75	May 16, 1887	Dec. 30, 1887	Old Age.
Anna Depp.............	79	Mar. 3, 1887	Jan. 11, 1888	Apoplexy.
Esther Caldwell........	75	July 12, 1886	Jan. 20, 1888	Chronic Dementia.
Johanna Ward.........	67	Nov. 27, 1885	Jan. 25, 1888	Atrophy and Debility.
Daniel Stone...........	77	April 1, 1886	Mar. 3, 1888	Apoplexy.
Edward Gallivan.......	57	Aug. 10, 1885	May 16, 1888	Apoplexy.
Elizabeth Anderson....	69	Mar. 7, 1885	June 12, 1888	Pneumonia.
Emily Duren...........	78	May 30, 1888	July 6, 1888	General Paralysis.
Philip Hubert..........	46	May 8, 1888	Oct. 3, 1888	Chronic Myelitis.
Maurice R. Connors...	59	Nov. 13, 1888	Oct. 8, 1888	Chronic Nephritis.
John Sullivan..........	68	Oct. 29, 1886	Oct. 8, 1888	Atrophy and Debilty.
Bernard P. Clark......	40	Nov. 26, 1887	Nov. 9, 1888	Consumption.
John F. Temple........	37	July 3, 1887	Nov. 28, 1888	Chronic Nephritis.

Products of the Farm.

3	barrels of apples	$6 00
60	dozen asparagus	50 00
200	bushels beans	300 00
200	bushels beets	100 00
14000	cabbages	700 00
	cabbage greens, sage and parsley	4 00
50	dozen sweet corn	5 00
185	boxes celery	650 00
6000	cucumbers	150 00
20	bushels carrots	12 00
2	bushels grapes	2 00
10	tons hay and straw	180 00
60	dozen hot-bed lettuce	30 00
100	dozen out-door lettuce	20 00
6	tons mangold-wurzels	90 00
80	bushels onions	72 00
300	bushels parsnips	225 00
2	barrels pears	2 00
90	bushels peas	100 00
4055	pounds pork	292 64
100	bushels potatoes	90 00
8	tons squash	140 00
100	quarts strawberries	10 00
450	bushels tomatoes	225 00
		$3455 64

The whole number of children attending school Nov. 30, 1888:

Boys	26
Girls	7
Total	33
Total during the year	60

Included in the whole number in the Almshouse Nov. 30, 1888, there are:

INSANE OR DEMENTED.

Males	7
Females	18
Total	25

IDIOTIC OR IMBECILE.

Males	1
Females	1
	2

Included in the whole number discharged during the year are the following:

To Insane Asylum	6
State Almshouse, Tewksbury	5
Temporary State Home for Foundlings	1

Remaining in the Almshouse Nov. 30, 1888:

Males	78
Females	57
Whole number	135
Adults	95
Minors—Boys 30, girls 10	40

Of the boys there are:

Boarders	2
Neglected children	4
Pauper children	7
Truant children	17
Total	30

Of the girls there are:

Neglected children	5
Pauper children	5
Total	10

Health.

Most of our old people come to us because they are sick and unable to labor; but under good medical treatment and faithful nursing, with a nourishing diet, many improve so much as to pass their days in comparative comfort.

Our children have enjoyed uninterrupted good health throughout the year.

No epidemic or contagious disease has visited us and we believe our building is in a good sanitary condition.

Truant School.

The adoption of a marking system for this school during the year has aided greatly in its discipline, and a marked improvement in the conduct and bearing of the boys is observed.

The plan of permitting boys to visit their friends for a day at a time on parole of honor has worked well. This tends to lighten the severity of the sentence imposed for truancy, and the cultivation of self-respect and a sense of honor is certainly preparing a boy to enter again, under more favorable circumstances, the school from which he was removed for irregular attendance.

The truant, if he is to be cured, must be made to feel, not that he has committed a great crime, but that he has made a great and dangerous mistake.

The teacher must endeavor with genuine friendliness to make him see this mistake and to desire its correction.

This school is one of the most hopeful features of the work of the institution and its results are very satisfactory.

New Drive-Way.

The superintendent begs leave to suggest the desirableness of laying out a new street to the Almshouse, between Tannery Street and the Arlington line.

The heavy teaming from the ledge, prevents us from keeping Tannery Street in good condition.

It would seem that the wealthy City of Cambridge ought to maintain a highway to one of its most important public buildings which shall be convenient and pleasant, and which will not have to be advertised to the travelling public as "dangerous passing."

If the new street is opened, about half its length will be on land owned by the city.

Conclusion.

The officers and employés of the institution have been faithful in the performance of their duties and the varied work of our large establishment has been well performed.

The business interests connected with the farm, ledge, offal department and chair shop, have received intelligent and prompt attention; the sick have been carefully treated and tenderly nursed; the Sunday services have been wisely and profitably conducted and rendered attractive by the singing by a well instructed choir of youthful voices. The superintendent desires to express his sincere thanks for the valuable aid and uniform kindness he has received from all the members of your board.

Respectfully submitted,

MARTIN L. ELDRIDGE,

Superintendent.

REPORT

OF THE

ASSISTANT CITY PHYSICIAN.

CAMBRIDGEPORT, December 1, 1888.

To the Overseers of the Poor: —

GENTLEMEN: I hereby render the following report of the doings of this office for the year ending Nov. 30, 1888.

One hundred and seventy-one visits have been made at the Almshouse, and 108 persons have received medical attendance therein, of whom 64 were males, 44 were females, 32 were men, 36 were women, 32 were boys and 8 were girls.

Two thousand and nineteen visits have been made to the sick poor, outside of the Almshouse, in attendance upon 551 different persons. Of these 245 were males 306 were females, 142 were men, 209 were women, 103 were boys and 97 were girls. The total number of visits made was 2190 in attendance upon 659 different persons.

Eighty-one persons have been examined relative to their sanity, and in 52 cases certificates of insanity have been made out.

Twenty-nine persons—25 males and 4 females—have been attended at the stations by request of the police. Of these 23 were treated for drunkenness, or for injuries received while drunk.

Ten persons have been ordered to the Carney Hospital, but the expense incident to their treatment was chargeable to Cambridge in only 3 cases.

Under the Civil Service Law 17 persons have been examined for the police force. Fifty certificates of vaccination have been given.

Seventeen women have been attended in childbirth, including two at the Almshouse, and 10 males and 7 females were born.

Fifty-four certificates of death where persons died without a physician in attendance have been issued.

Forty-five deaths—32 outside and 13 in the Almshouse—have occurred. Of those outside 13 were of consumption, 3 old age, 2 infantile debility, 2 cholera infantum, 1 colo-enteritis, 1 æsophageal stricture, 1 pneumonia, 1 scarlatina, 2 chronic nephritis, 1 hemorrhage, 1 paralysis, 2 atrophy and debility, 2 unknown. Of those in the Almshouse 1 was of consumption, 3 of apoplexy, 1 chronic dementia, 2 atrophy and debility, 1 pneumonia, 1 general paralysis, 1 chronic myelitis, 2 chronic nephritis and one of old age. Of the total number of deaths only 7 were from acute diseases.

Medicine and surgical appliances and office sundries for the use of those outside to the amount of $314.25, and for those in the Almshouse to the amount of $179.20 have been purchased. Total amount expended $493.45.

Very respectfully submitted,

LEWIS L. BRYANT,
Assistant City Physician.

CITY CLERK'S ACCOUNT OF FEES AND LICENSES.

CAMBRIDGE, Dec. 18, 1888.

To the Honorable the City Council :—

THE undersigned herewith presents an account of the sums received for Fees and Licenses during the year ending November 30, 1888.

Auctioneers' Licenses	$38 00
Pool and Billiard Table Licenses	68 00
Wagons and Carriages	98 00
Intelligence Offices	12 00
Junk Licenses: Stores and Collectors	280 00
Pawnbrokers	10 00
Recording Mortgages, Assignments of Wages, etc.	470 12
Marriage Certificates	321 50
Certified Copies from the Records	6 87
Dog Licenses (1897, at 20 cents each)	379 40
Liquor Licenses	44 00
Licenses for the Sale of Fireworks	88 00
Sundries	8 00
	$1,823 89

The receipts from Dog Licenses have been as follows :—

1,695 Males at $2	$3,390 00
202 Females at $5	1,010 00
Total	$4,400 00

Of this amount, the Clerk's fee (20 cents for each license issued), amounting to $379.40, has been paid into the City Treasury, and the balance amounting to $4,020.60 has been paid into the County Treasury.

Respectfully submitted,

WALTER W. PIKE,
City Clerk.

CITY TREASURER'S FEES

FOR THE YEAR ENDING NOV. 30, 1888.

CAMBRIDGE, Dec. 1, 1888.

To the Honorable the City Council: —

I RESPECTFULLY report that during the year ending November 30, 1888, I received, as Collector of Taxes, the following fees, viz: —

From advertisements of Collector's sale . . .	$110 40	
From making affidavits of demand and sale .	66 62	
From making deeds of estates sold	246 00	
From posting notices of sale	96 50	
From poundage	40 85	
From preparing advertisements	161 90	
From summonses	762 42	
Total amount of fees received		$1,484 69

All of which has been paid into the City Treasury.

WM. W. DALLINGER,
City Treasurer.

REPORT

OF THE

CITY MESSENGER.

CAMBRIDGE, Dec. 17, 1888.

To the Honorable the City Council of the City of Cambridge: —

GENTLEMEN: In compliance with the City Ordinance governing the purchase and delivery of stationery, the undersigned herewith presents his annual report of the amount purchased during the year, with a statement of the deliveries made (as per requisitions on file) to the various departments, and the amount of stock on hand at the close of the year ending November 30, 1888.

Stock of stationery on hand, Dec. 1, 1887	$263 20
Purchased during the year	1,364 82
Total	$1,628 02

Delivered to heads of departments as follows: —

Street	$29 64
Engineering	41 76
Auditor	72 04
Treasurer	390 81
Police	117 08
Lamp	10 37
Fire	11 64
Inspector of Milk	15 94
Clerk of Committees	129 09
City Clerk	160 68
Harbor Master	2 00
Probation Officer	14 95
City Messenger, use of City Council, etc.	163 94
Assessors	198 09
City Solicitor	44 68
Stock of Stationery on hand	225 31
Total	$1,628 02

Respectfully submitted,

FRANCIS L. PRATT,

City Messenger.

REPORT

OF THE

TRUSTEES OF THE PUBLIC LIBRARY.

To the City Council of Cambridge: —

An ordinance of our city requires the Trustees of the Public Library to present to the City Council annually, in the month of December, a report of their proceedings for the year, with accurate statements of all receipts, expenditures, number of books added during the year, the condition of the library, together with any other information or suggestions which they may deem desirable.

In conformity with this ordinance the Trustees herewith submit their annual report, which is the thirty-first since the library was assumed by the city, under the title of *The Dana Library;* the fifteenth since it was made free to the public; and the ninth since its name was very properly changed by the City Council to that of *the Cambridge Public Library.*

We append herewith, as a part of our report, the report of the Librarian to the Trustees. We would call careful attention to the detailed figures of this report, and to the suggestions and recommendations contained therein. The business of the library has for many years been carried on with efficiency and success by the librarian and her faithful assistants, to the entire approval of the Trustees, and pleasing we believe, to the public. By her report it appears that nearly two thousand more books have been issued the past year than in any other since 1879, and that the average circulation per day for the past year has been 281 copies. While the trustees are aware that the total number of books given out is not a proper standard by which to judge of the usefulness of a library, but that the *character* of these books, and the careful manner in which they are read, is the true standard of profit, yet the circulation shows somewhat the appreciation by the public of the privileges granted, and opportunities offered to them.

The work of the library is that of an educator, and its aim is to improve and help all who come within its influence. Many of its patrons are scholars in our public schools. Some are mechanics and laborers in workshops and factories, or clerks in stores and counting-rooms. Some are students, or inquirers, for more light on special subjects. To all these and to those who have an earnest desire for books but who cannot afford to purchase them, the public library is a boon and a blessing impossible to be overestimated. The efforts of the Trustees have been to make it as complete a storehouse of information as possible for all classes and all ages of readers. In making their selections they have endeavored to satisfy the proper wants of all. Hence standard encyclopædias and works of reference have been purchased, as well as valuable books of art and general literature, with volumes of biography, history, poetry, religion, science, travel, and the better class of fiction. The open and free use daily of all this varied mass of information and reading matter, with comfortable rooms for its perusal, can be no other than an incalculable good ; and it is one of the highest trusts, of which the city cannot be too careful, and to which it should accord a generous support.

The Trustees, desirous to cultivate more intimate relations between the library and our schools, voted in January last to so modify the rules of the library that, on the written recommendation of any teacher in our public schools, suitable pupils, under fourteen years of age, thus recommended, might be entitled to the use of the books upon complying with such rules of the library as have been adopted for its management in the case of older persons. Also, upon application by a head master of one of our schools, permission was given him to take not exceeding twenty-five books at any one time for reading by the scholars of his first and second classes, to be used at his discretion in furthering the work of education in his school, and to develop a taste for good reading; said master to be held responsible for the return in good condition of all the books thus loaned. In such ways the library can be made a powerful auxiliary to our system of public instruction, and helpful to both teachers and pupils. We hope, as the librarian says in her report, that "with increased facilities and ample room, many more teachers and pupils will avail themselves of the help which the library offers."

In addition to the general catalogue completed last year, a separate list of children's books was prepared early in the year. The intent of this catalogue was to save much wear of the larger catalogue ; and as it embraces all the juvenile books of the library, as well as a few other books especially useful and instructive to young people, it will the more easily lead them to a proper use of these juvenile books and of the library as a whole.

The Fay Legacy.

In the year 1873, Mr. Isaac Fay, a public-spirited citizen of Cambridge, bequeathed to the library $1,000, the income of which was to be expended in the purchase of books for the library. This money, received in 1874, was then invested in a demand note of the city, dated November 30, 1879, bearing six per cent interest and made payable to the Trustees of the Dana Library, as the Library was then called. By vote of the Finance Committee of the city this sum was last year taken from the city treasury and paid over to the Trustees of the Public Library who have reinvested it in a $1,000 Cambridge City Bond, No. 83, dated August 1, 1888, bearing four per cent interest, which bond is in the custody of the City Treasurer. The income from this fund has been regularly expended by the Trustees in the purchase of books for the library in accordance with the wish of the donor, and an especial account of these purchases kept on record.

The Reading Room.

This room, established by the Trustees in 1872, and opened to the public in 1873, has been well patronized and appreciated. But its small size and inconvenient facilities have been a source of regret to the Trustees. A reading room is a valuable appendage to a library, for many resort to it not only to read the newspapers and periodicals, but to quietly consult standard books of reference not to be taken away. Of the great advantage of such a room there can be no reasonable doubt. We are glad, therefore, that we are soon to have in our new building a more commodious and suitable room for this department, so valuable an auxiliary to the library, and which with proper accommodations will become more and more useful and popular.

The Trustees look forward with interest to the completion of the new library building, which it is hoped will be ready for occupancy during the coming summer. To the generous donor of this munificent gift the city cannot be too grateful. And when our already great and constantly growing collection of learning and entertainment is stored within its walls, it will be something eminently worthy the pride and admiration of our citizens.

Owing to its humble situation and imperfect facilities, the value of our library has not hitherto been fully known or appreciated; nevertheless it has silently, but none the less effectually, been doing good work. It has increased since the close of 1873 from 6,672 volumes to 20,440. During this time the circulation has been as follows: —

1874	47,327	volumes	1882	78,934	volumes.
1875 (9½ months)	62,289	"	1883	83,975	"
1876	82,312	"	1884	79,840	"
1877	81,241	"	1885	83,016	"
1878	90,447	"	1886	78,206	"
1879	87,277	"	1887	84,282	"
1880	83,184	"	1888	86,221	"
1881	82,850	"			

Much thought and consideration will be required in devising plans to make our library still more successful in its work and in its future career of usefulness. Improvements should be promptly introduced as experience may suggest their necessity. Liberal provision must be made in the future to enable the Trustees to keep it in good condition, thoroughly up with the times, and fully equal to the demands of the people upon it. We hope that benefactions from others will follow the gift of the new building, and that from these the influence of the library, as a power for good in the community, may be increased a hundred fold. Donations to the Memorial room, as suggested in the report of the librarian, or funds whose annual income of interest might be spent for books, would help to place the library on a more secure basis, and at the same time add to its attractiveness.

The probable change to the new building during the summer, and consequent cost of removing the books from the present rooms; the expense of re-covering at least 10,000 volumes, and of shelving and arranging the whole library in its new quarters; the necessity of printing a supplement to the large catalogue in order to make it complete for reference; together with an increased number of books to be bought for the library, and of periodicals to more properly supply the new reading-room, will necessarily involve increased expenses over previous years. We therefore ask for such an appropriation from the city as will, with the revenue, net for the use of the library this year at least the sum of $10,000.

The following is a report of the appropriations and expenses for the past year: —

Receipts.

Appropriations for library		$2,800 00
Estimated revenue	$4,500 00	
Excess of revenue over estimate	17 12	4,517 12
Total receipts		$7,317 12

Expenses.

Salaries	$3,041 95	
Rent	1,000 00	
Books and periodicals	2,116 28	
Binding	568 31	
Gas and water	261 22	
Printing and stationery	119 63	
Children's catalogue and accession lists	116 50	
Furniture and repairs	12 80	
Petty expenses	62 93	
Total expenditures		$7,299 62
Unexpended balance		$17 50

Respectfully submitted,

SAMUEL L. MONTAGUE, *Chairman,*
JABEZ A. SAWYER,
HENRY H. GILMORE,
OLIVER H. DURRELL,
HENRY A. DOHERTY,
ALVIN F. SORTWELL,
CHARLES WALKER, *Secretary,*

Trustees of the Cambridge Public Library.

REPORT

OF

THE LIBRARIAN.

To the Trustees of the Cambridge Public Library:—

GENTLEMEN: In presenting this, her fifteenth annual report, the Librarian finds it a pleasant duty to direct your attention to the necessary preparations for removing the library. The new building will probably be completed during the summer of 1889. It will be necessary before that time to call in all the books in circulation, and to cover about one half the entire library, ten thousand volumes. This, with the removal and shelving of the books in the new rooms, will require at least two months' time.

If the covering, etc., is done here, in the present rooms, the books will perhaps be soiled in moving and much of the work will have to be repeated. If the stack-room and work-room of the new building could be made ready for occupancy as early as possible, the work could be carried on there, thus obviating the necessity of closing the library for so many weeks. The later and most popular books could be the last to be moved, and they would meet the usual wants of our readers.

The removal will involve additional expense, which should be considered in asking for the next annual appropriation.

In accordance with the suggestions of the last annual report several boxes of government publications have been packed for removal, and still it is difficult to find shelf-room for our new purchases. During the past year many valuable books have been added to the library.

The Reference Library now contains seven sets of encyclopædias, and is particularly rich in valuable illustrated books on art, travel, science, etc. It represents a value of at least one thousand dollars. In the new building these books are presumed to be placed in the open cases around the sides of the Reading Room.

Will it not be desirable to call the public attention, at an early date, to the purpose of the Memorial room? Souvenirs of the history of Cambridge and of the late war will there find a suitable and safe place for preservation. Portraits or busts of the many distinguished Cambridge authors might well adorn the new rooms. We have already received some gifts of this character; may we not hope for others?

The close relation between the library and the public schools continues to afford much satisfaction, and with increased facilities, and ample room, no doubt many more teachers and pupils will avail themselves of the help which the library offers. Several private reading clubs in the city have found our reference books useful, and the pupils of the high schools are learning how to use the library as a means of education. The new regulation which allows pupils in the highest class in the grammar schools to have library cards, though under the required age, has added many to our number of young readers.

The list of children's books prepared early in the year is in constant use; indeed, we find it impossible to prevent the taking from the room of these small catalogues. Could we afford to give a copy to each family using the library, it would prevent the temptation to take them, which many poor children seem unable to resist. Only eleven copies have been sold.

The bulletins of accessions since the issue of the catalogue already number five. It may be best to print a supplement to the catalogue during the coming year, as the additions will soon amount to two thousand volumes.

The question of branch libraries, or at least branch deliveries, has already begun to attract attention. Wards IV. and V. will be about equally distant from the new building. Many of our present readers have expressed a desire to have a reading room and branch delivery in this part of the city, when the library is removed.

The statistics of library work for the past year are as follows: –

BOOKS ISSUED.

First Quarter	24,546	av. per day 324
Second "	24,381	" " " 312
Third "	16,673	" " " 217
Fourth "	20,621	" " " 271
Total for the year	86,221	" " " 281
The largest issue for any day	647	January 14
The smallest	106	August 9

This is the largest issue of any year since 1879, that of 1887 being 84,282.

BOOKS ADDED.

	Purchased.	Given.	Exchanged.	Totals.
First quarter	144	1	–	145
Second "	311	2	2	315
Third "	0	0	0	—
Fourth "	618	4	6	628
	1,073	7	8	1,088
Present number of books in the library				20,440

Four volumes of the History of Cambridge have been exchanged for eight other town histories.

The government publications received during the past year have not been shelved, for lack of room, and are not reported, having been packed for removal. Five volumes have been lost, the persons who drew them from the library having moved from Cambridge, or having failed to replace them.

LIST OF DONORS.

Morrill Wyman, Jr.
City of Cambridge.
City of Haverhill.
Miss Julia Morgan.
Prof. E. N. Horsford.
Dr. R. M. Lawrence.
Col. L. B. Marsh.

No. of postals sent for books over-due	2,091
Books lost during the year	5
Books destroyed because of contagious diseases	10
Books covered	11,704
Books bound or repaired	4,429
Books worn out and replaced	372
Number of new cards issued	1,469
Present number of card-holders	11,282

RECEIPTS FOR FINES AND CATALOGUES.

	Fines.	Catalogues.	Totals.
First quarter	$46 13	$1 50	$47 63
Second "	53 79	6 25	60 04
Third "	40 65	3 55	44 20
Fourth "	45 26	4 65	49 91
	$185 83	$15 95	$201 78

This amount is larger than that of any previous year. The city treasurer's receipts for the same have accompanied the quarterly reports.

The Reading Room continues to be well-filled each evening, and would be much missed by many living in this vicinity.

All of which is most respectfully submitted,

ALMIRA L. HAYWARD,

Librarian.

REPORT

OF THE

JOINT STANDING COMMITTEE ON PUBLIC PROPERTY.

The duties of this committee during the year just ended have required constant attention and have related to matters involving a large degree of responsibility. A review of the work done under its supervision, together with the usual list of city property is herewith presented.

Following is a statement of some of the improvements and repairs carried forward under the direction of the committee: —

New Buildings.

1. Coal Station: For use of the Fire Department for storing coal, in the yard of the Boardman School-house, on School Street.
2. Bath House: For public bathing—on Western Avenue, near the draw-bridge.
3. School-House: Erection of a brick school-house on Linnæan Street.

Improvements and Repairs.

1. Washington School-house: Extensive repairs inside, painting, etc.
2. Webster School-house: New plumbing and ventilating.

The subject of the erection of a new English High School Building has been before the committee, under an order instructing it to procure plans and specifications therefor, and the same will be mentioned hereinafter, in connection with the subject of new school-houses.

The question concerning the erection of a bathing house on the Charles River, was at length definitely settled, and the wants of our citizens in that respect, in the western portion of Ward Four, have thus been provided for. The request of the two military companies of the city for a suitable shooting-range has also been met, and they now have the desired acommodation for their rifle-practice on the borders of Cider Mill Pond, so called.

The subject of encroachments existing upon various lands of the city, was referred to this committee from the files of the year 1887. The matter has been thoroughly investigated in the past, and by reason of the length of time during which these encroachments have been maintained, it is extremely doubtful as to whether or not any action can be taken in the matter, which will result in establishing the correct lines of any of the lands encroached upon.

The new school-house on Linnæan Street, now being constructed under contract made by this committee, is going forward as rapidly as possible towards its completion, but may not be ready for occupancy until the beginning of the school year of 1889, in September.

As this committee has had occasion to remark in former reports, the services rendered to it by the Superintendent of Public Buildings have been of great value. His judgment, matured through many years of experience as a contractor and builder, has proved a safe guide in all important undertakings entrusted to the committee.

Following is a statement of the expenditures under various heads of appropriations, approved by this committee to Dec. 1, 1888, and by the committee of the previous year, for the month of December, 1887, it being the period included in the financial year of 1888.

Heads of Appropriations.

City Buildings (care and repairs) :—

City Hall (including fuel)	$3,536 39	
City Building, Brattle Sq., including fuel . .	3,648 08	
City Building, Central Sq., including fuel . .	2,490 04	
Other buildings, gas, etc.	35 64	
		$9,710 15
Amount carried forward		$9,710 15

Amount brought forward		$9,710 15
Fire Department :—		
Engine House No. 1	77 45	
Engine House No. 2	104 13	
Engine House No. 3	88 69	
Engine House No. 4	309 01	
Engine House No. 5	125 54	
Hook and Ladder House No. 1	9 87	
Hook and Ladder House No. 2	120 38	
Chemical House	38 88	
		873 95
Fire Department :—New Coal Station		687 00
Rifle Range		206 25
Incidental expenses :—		
Care of public clocks	188 45	
Election expenses, fitting up polling places, etc.	532 30	
Boarding and shoeing horse, Superintendent Public Buildings	385 27	
Shoveling snow from sidewalks in front of City lands and public squares	111 66	
Repairs on rifle range	165 15	
Extra labor at Bath house	483 07	
Care of ward rooms	100 00	
Care of Industrial School	10 00	
Labor and stock on hay scales	17 16	
Care of fires, Police Station and Engine House Ward 3	40 00	
Extra labor on new Almshouse building	140 20	
Repairs on Drinking Fountain	9 70	
Miscellaneous	79 28	
		$2,262 24
Police Department, repairs and furnishing stations :—		
Station 1	116 59	
Station 2	2 35	
Station 3	353 70	
Station 5	185 11	
		$657 75
School-houses (care and repairs) :—		
Fuel and weighing (approved by Committee on Fuel)	11,105 70	
Gas	540 76	
Janitors	13,061 69	
Repairs and furnishing	8,826 38	
Supplies and sundry expenses	2,529 20	
		$36,063 73
Amount carried forward		$50,461 07

Amount brought forward		$50,461 07
School-houses (new and furniture) :—		
Peabody School—Linnæan Street	5,303 74	
Putnam School-house completion	10,454 74	
Webster School-house plumbing	2,029 87	
Evening Schools, Janitors, etc.	848 50	
Evening Drawing Schools, Janitors, etc. . .	1,403 07	
		$20,239 92
		$70,700 99
Less items for fuel (approved by Committee on Fuel) :—		
City Hall	486 58	
City Building, Brattle Square	989 85	
City Building, Central Square	753 81	
School-houses	11,105 70	
		$13,335 94
Leaving amount of bills approved by this committee		$57,365 05

The items for fuel are given in the foregoing, in order to show the total cost of maintenance of the several buildings, but are deducted from the aggregate to show the amount of bills approved by this Committee. All fuel is contracted for by the Committee on Fuel, and the bills therefor are approved by that Committee.

The amount of bills approved by the Committee on Public Property in 1887 was	64,914 08
Bills approved in 1888 was	57,365 05
Decrease in 1888	$7,549 03

The Putnam School-house enlargement was completed in the year 1888, and the Peabody School-house on Linnæan Street, was begun. The amounts paid on the contracts for these school-houses are included in the aggregate of bills approved in the year 1888.

The following is an analysis of expenditures under the several heads of appropriations.

City Buildings.

Under this head are included the City Hall, and the city buildings in Brattle and Central Squares, the accounts being kept separately with each building.

City Hall.

The expenditures in and upon the City Hall building in the year 1888 were as follows: —

For Fuel	$486 68	
Gas	422 42	
Janitor	1,205 18	
Extra cleaning	540 20	
Repairs, heating apparatus	46 66	
General repairs	369 94	
Furnishing and repairs	411 74	
Miscellaneous	53 67	
Total		$3,536 39
In 1887 the cost was		4,146 83
In 1888 the cost was		3,536 39
Decrease		$610 44

There were no extraordinary repairs upon this building, and it is not likely that any will be made in the future, except such as are imperatively needed to keep out the wind and rain. There are yet serious leaks in the roof which will require the attention of the committee of the next year.

City Building (Brattle Square).

The cost of maintenance of the City Building, Brattle Square, in 1888, was as follows: —

For Fuel	1,085 10	
Gas	569 11	
Janitor	1,254 85	
General Repairs	663 49	
Miscellaneous furnishings	75 53	
Total		$3,648 08
In 1887 the cost was		3,676 43
In 1888 the cost was		3,648 08
Decrease		$28 35

The repairs at this building included items for painting, plumbing, repairs on the roof, and retubing the boiler, and other miscellaneous work. No attempt has been made to reconstruct the drainage system of the building, although it has been the subject of serious complaint in recent years. The subject is likely to be brought to the notice of the next year's committee on Public Property.

Nearly all of this building is used for city purposes, a portion being let and revenue therefrom received as follows: —

Armory, Co. B. 5th Regt. M. V., M. rental	$400 00
District Court (Third Middlesex)	350 00

City Building (Central Square).

The cost of Central Square building in 1888 was as follows: —

For Fuel	658 56	
Gas	263 64	
Janitor	1,205 18	
General repairs and furnishing	348 38	
Miscellaneous	14 28	
Total		$2,490 04
The cost in 1887 was		2,624 44
The cost in 1888 was		2,490 04
Decrease		$134 40

The expense of maintaining this building was probably reduced to a minimum amount in the year 1888, and it is not likely that another year will elapse without the incurrence of a considerable outlay thereon. A call is already made for repairs upon the roof to stop existing leakage.

Other City Buildings.

Besides the various buildings hereinbefore mentioned, the committee has had charge of the repairs upon the various engine houses and police stations, the items of expenditure for which are previously stated herein. The whole amount charged to the appropriation is as follows: —

	1887.	1888.	Decrease.	Increase.
City Hall	$4,146 83	$3,536 39	$610 44	
Central Square Building . .	2.624 44	2,490 04	134 40	
Brattle Square Building . .	3,676 43	3,648 08	28 35	
Engine Houses	1,041 51	873 95	167 56	
Police Stations	190 45	657 75		467 30
Miscellaneous at ward rooms	48 79	35 64	13 15	
Totals	$11,728 45	$11,241 85	$953 90	$467 30

Reduction of expenditure under all the above heads, except police stations	$953 90	
Additional expenditures on police stations	467 30	
Net reduction under the above heads	$486 60	

The amount expended for care and repairs of the several City buildings was :

In 1887	$11,728 45	
In 1888	11,241 85	
Decrease in 1888	$486 60	
The amount appropriated in 1888 was		$11,500 00
Less amount transferred		200 00
Net appropriation		$11,300 00
Amount expended		11,241 85
Balance unexpended		$58 15

Fire Department.

A coal station was built in 1888 for the use of Engine Company, No. 2, in the rear of the Boardman school-house lot on School Street. The cost of this building, which was charged to the appropriation for Fire Department, was $687.00. The company has heretofore used for storage purposes, a wooden building on Cherry Street, leased by the city. The removal of this building by the owner to make place for a dwelling-house, necessitated the erection of a station house by the city.

New Building for Hook and Ladder Truck No. 2.

This new brick building on Portland Street, which was begun in the previous year under a contract with H. Coon & Co., was finished in 1888.

The work was carried on under the supervision of the Superintendent of Public Buildings, and was completed early in the year.

The amount expended in 1887 was	$10,045 52
Balance expended in 1888	7,135 77
Total cost	$17,181 29

This sum was a few dollars in excess of the original estimate, the same being caused by additional work not originally contemplated.

Incidental Expenses.

In the items under this head, approved by this committee in 1888, is the amount paid for the erection of a new Rifle Range at Old Cider Mill Pond, the one at the Almshouse ledge having been considered dangerous and not fully up to the wants of the Militia in this city. The contract for the building of the same was awarded to W. E. Rose for $825.00; also the cost of a Public Bath-house, which was built under contract of Colin Chisholm for $1,970, and upon its completion located near the drawbridge on Western Avenue.

Police.

The expenditures upon the Police Stations have been somewhat in excess of last year, Station Three having undergone extensive repairs, which were very much needed in its sanitary arrangements.

School Houses.

The appropriations under this head in the year 1888 were as follows:—

	Original Amounts	As Afterwards Changed
School-houses (care and repairs)	$35,000 00	$36,215 39
Land for High School	20,000 00	20,100 00
School-house on Linnæan Street, Land for same	6,925 00	6,825 00
School-house on Linnæan Street	20,000 00	22,500 00
Putnam School-house completion	10,600 00	10,454 74
Webster School-house plumbing	2,500 00	2,029 87
	$95,025 00	$98,125 00

The subject of the erection of an English High School building was referred to this committee early in the year. A lot of land situated on Broadway and Irving street was intended as the site for the building, the same being one of the parcels of land given to the city by Mr. Frederick Rindge. Proceedings were begun by the Board of Aldermen, for the acquirement of additional land adjoining the lot before mentioned. Owing to the determined opposition of some of the owners of this adjoining land, the donor of the land offered to the city another lot situated on Broadway, Trowbridge and Ellery streets, originally intended by him as a site for a Manual Training School Building, and selected the first named lot as the site for the latter building. The land on Broadway, Trowbridge and Ellery Streets has been conveyed to the city by deed and this committee was authorized by the City Council to procure plans and specifications for a High School Building with a capacity for 550 to 600 pupils and of the estimated cost of about $90,000. A conference was had with the sub-committee of the School Board upon the High School, in reference to the selection of a competent architect for the structure required; the result was the selection of Messrs Chamberlain and Whidden as the architects, Mr. Chamberlain being a resident of this city and well known as holding a high rank in his profession. The subject of the size and style of the required structure and the general details of the plans were referred to the Chairman of the sub-committee of the School Board on the High School, and the Superintendent of Schools, to whom the architect submitted studies of plans for the building. Plans of the elevation of the proposed school-house have been submitted by the architect, and have been exhibited to the City Council in the office of the Superintendent of Public Buildings, but no authority has been given to this committee to ask for proposals, or make a contract for the erection of a building. The subject will doubtless receive timely consideration at the hands of the next City Council.

The Putnam School-house enlargement, which was unfinished at the close of the last year, was completed in the year 1888.

The amount expended in 1887, including land, was	$9,304 74
Balance of expense of completion	10,454 74
Total cost of the building	$19,759 48
The estimated cost was	18,149 74
Excess over estimate	$1,609 74

This excess was caused by changes in the original plans of the work.

The amount appropriated for completing this building in 1888, was	$10,600 00
Amount expended	10,454 74
Balance transferred	$145 26

The contract for a new school-house on Linnæan Street was awarded early in the season to Lord Bros., masons and contractors, of Somerville, for the sum of $21,824.00 They have begun their work and the building is ready for work on the inside. The contract calls for the completion of the job by the first day of April, 1889.

It is estimated that the total cost of this school-house, with land, will be as follows :—

For Land	$6,825 00
Contract for building	21,824 00
Heating	2,150 00
Plans	550 00
Supplementary contract	700 00
	$32,049 00

The amount appropriated for this purpose was

For Land	$6,825 00	
Building	22,500 00	
Total		$29,325 00

Amount Expended.

For Land	$6,825 00	
Work done on contract	5,300 00	
Sundries	3 74	
		$12,128 74
Balance unexpended		$17,196 26

The sanitary condition of Webster school-house (old portion), concerning which serious complaints were made in the year 1877, has been carefully looked after by this committee. The old urinals have been removed and an entirely new system has been put in. The nuisance heretofore complained of has been entirely remedied.

The amount appropriated for this improvement was	$2,500 00
Amount expended	2,029 87
Balance transferred	470 13

Complaints have been made from time to time of an alleged nuisance at the Gannett school-house, on Jefferson Street, said to be caused by want of proper ventilation. The building has been inspected by the Health Officer and by the Superintendent of Public Buildings. Both have thus far failed to discover any cause for complaint in this respect. The building was erected in 1886, under the supervision of a competent architect and all the arrangements respecting drainage and ventilation were regarded as complete and satisfactory. The subject of the sanitary condition of this building was brought to the notice of the State Inspector of buildings, and he, with other associates with him, have visited the premises. They believe that the sanitary arrangements therein, are imperfect, and should be changed. At the request of these officials, a hearing was given to them, and others interested, before this committee.

They presented testimony corroborative of their declarations in regard to the foul odors permeating the rooms, while on the other hand equally strong conflicting evidence was submitted at the hearing, Prior to this hearing notice was served on the city by the state authorities, requiring that the evil complained of should be remedied by changing the sanitary arrangements of the building. No definite action has been taken in the matter, and it is likely that the next City Council may be asked to appropriate money for this purpose.

The appropriation for school-houses (care and repairs) in 1888, as originally made, was	$35,000 00
Added by subsequent transfer	1,215 39
Total appropriation	$36,215 39

Expenditures.

	1887.	1888.
Blackboards	$246 66	$135 52
Fuel	7,793 08	11,105 70
Furniture and repairs	10,154 36	1,269 73
Gas	785 25	540 76
Gravel, grading, and paving	223 12	12 25
Hardware and tools	212 35	90 83
Heating apparatus and repairs	5,549 03	2,188 02
Janitors and extra labor	13,011 48	13,061 69
Repairs of buildings, fences, and lumber	159 06	5,920 71
Supplies, miscellaneous	474 28	729 27
Sundry expenses	296 61	1,002 02
Water		7 23
	$38,905 58	$36,063 73

The cost of repairs and supplies in all the school-houses, exclusive of the items of fuel, gas, water, and janitors, was $11,353.35.

For school-houses, care and repairs, there was appropriated the sum of	$36,215 39
Amount expended	36,063 73
Balance unexpended	$151 69

The amount expended in 1887, was	38,905 58
The amount expended in 1888, was	36,063 73
Decrease in 1888	$2,841 85

Although there was not as large an expenditure under this appropriation head as during the previous year, there was nevertheless a large amount of work done upon the several school-houses, and all possible effort made to render them comfortable to teachers and pupils. The Washington school-house was thoroughly renovated inside and extensive repairs made upon nearly all the other school buildings.

The amount required in coming years for the ordinary repairs of our school-houses is not likely to be less than the average of the past three or four years. The old wooden buildings now in use are rapidly going to decay, and only a constant outlay upon them can render them serviceable for school purposes.

Details of the work done in 1888, may be found in the annual report of the Superintendent of Public Buildings. The amount actually expended is only slightly in excess of his estimates as submitted in his report of the year before.

The cost of maintenance of each school-house is shown in the following tables, the same being classified under the several headings. The item of gas is included under the general head of furniture and supplies.

Maintenance of School-Houses.

Names.	Fuel.	Furniture and Supplies.	General Repairs.	Janitor.	Total.
English High	$435 75	$330 29	$403 60	$858 62	$2,028 26
Latin	365 63	156 33	82 09	502 98	1,107 03
Allston Grammar	363 00	48 45	764 44	502 93	1,678 82
Corlett Grammar	76 10	1 50	160 26	240 11	477 97
Harvard Grammar	792 35	259 49	239 65	868 33	2,159 82
Putnam Grammar	521 50	149 99	491 93	429 97	1,593 39
Shepard Grammar	510 25	25 81	573 67	504 98	1,614 71
Thorndike Grammar	468 00	52 64	193 44	502 84	1,216 92
Washington Grammar	703 00	665 41	980 78	507 22	2,856 41
Webster Grammar	855 35	371 47	661 58	810 40	2,698 80
Wellington Grammar	807 72	51 47	137 26	360 93	1,357 38
Agassiz Primary	322 38	16 90	312 72	502 98	1,154 98
Boardman Primary	305 10	50	425 97	226 16	957 73
Bridge Primary	37 38		109 37	132 38	279 13
Cushing Primary	157 70	11 90	124 68	226 16	518 44
Dana Primary	109 88	1 25	339 65	261 91	712 69
Dunster Primary	195 48		212 95	309 69	718 12
Felton Primary	187 25	142 52	627 76	242 11	1,199 64
Gannett Primary (Old building)	160 50			352 92	513 42
Gannett Primary (New Jefferson St).	182 13	1 41	267 61	354 37	805 52
Gore	516 61	39 76	49 92	482 10	1,088 39
Holmes	286 00	7 82	213 01	313 33	820 16
Lassell	165 30	11 04	110 21	301 69	588 24
Lowell	281 95	31 50	167 63	251 49	732 57
Mason	83 85	1 15	9 08	226 36	320 44
Otis	224 80	11 22	197 64	251 12	684 78
Quincy	165 95	7 63	39 41	251 49	464 48
Reed	136 10	2 70	17 65	301 69	458 14
Riverside	138 55	27 64	247 52	308 49	722 20
Sargent	194 50	18 30	45 16	217 06	475 02
Stearns	166 50	60 17	62 13	221 06	509 86
Tarbell	253 25	28 45	125 86	312 19	719 75
Willard	455 58	104 58	221 64	503 13	1,285 03
Wyman	478 71	16 00	184 87	402 60	1,082 18
Superintendent's office		91 46			91 46
All Schools (Weighing Coal)	3 60	323 21	25 24	19 80	371 85
Totals	$11,105 70	$3,069 96	$8,826 38	$13,061 69	$36,063 73

City Lands and Surrendered Estates.

The matter of the appraisal and sale of the unimproved city lands has each year, for several years past, been committed to a joint special committee consisting of the Mayor, President of the Common Council and members of the Committee on Public Property.

At the Mayor's request he was excused from service upon the before-mentioned special committee, and the committee was constituted as heretofore without the addition of the Mayor. The usual authority to make sales was given to this committee. Only a few sales of city lands were made in 1888, the total receipts therefrom being $7,228.00.

Mill Pond District.

There is no change to report in reference to the Mill Pond Lands. A plan of the lands situated in the old basin east of Putnam Avenue, was prepared by the City Engineer in 1884, and adopted by the City Council of that year. This plan shows the land with proposed streets extending through the same, and lots of dimensions averaging 40x85 feet.

Inasmuch as there are private parties owning land in this district, adjoining that of the city, and with whom it is necessary to make satisfactory arrangements in order to carry out the details of the aforesaid plan, no attempt has recently been made to sell any lots according to said plan. The city has been unable thus far to make any equitable terms with some of these adjoining owners.

The upper basin of the old Mill Pond is in charge of the Street Department, and when entirely filled will be used for wharf purposes.

The Mill Pond Lands east of Putnam Avenue are likely to increase in value, and in the judgment of this committee, arrangements should be made with the other owners of lands in the district, abutting on Western Avenue, by which lots of uniform and salable size can be secured to all the owners.

Tax-Title Lands.

There has been no change in reference to this kind of property during the year.

Janitors.

What the committee has to report under this head, must be mainly in repetition of the statement of former reports. The recital of facts heretofore stated, and the declaration of views of the committee often heretofore expressed, are given only to emphasize its opinion that the interests of the city require that the public buildings should be in charge of employés directly responsible to those who have to keep the buildings in proper repair and look after the expenditures generally. Of the four divisions in the classification of expenditures for the maintenance of school-houses, the amount paid to the janitors is the largest item, being $13,061.19.

There are twenty-four janitors of school-houses and three janitors of city buildings employed under the direction of the Committee on Public Property. The duties of the janitors of the larger school-houses, as well as those of the city buildings require undivided attention. Of the janitors of school-houses, there are fifteen who have the charge of one building each; eight have charge of two each, and one has charge of three buildings.

Such of the janitors as have large buildings under their charge, are paid accordingly, and they are expected to give their undivided attention to their duties.

Others in charge of four-room school-houses are paid less, and must seek other employment at times to eke out a living.

These janitors are expected to conform to printed regulations prepared by this committee and approved by the Superintendent of Schools. A copy of these rules has been placed in the hands of each janitor.

It is not only the earnest desire, but the particular request of this committee that the school teachers shall report forthwith, any and all cases of dereliction of duty on the part of the janitors of their respected schools.

The committee also employs the janitors of the Ward Rooms of Wards Three and Five, during the seasons of the evening schools, when the rooms are used. Although these employés are appointed by the Committee on Public Property, and by that committee are held responsible for the right performance of their duties, they are directly under the authority of the principals of the schools, and are expected to obey their orders.

Blank reports of the manner in which the janitors of school-houses perform their duties, have been prepared by the Superintendent of Schools for use by the respective principals of the schools.

The committee has urged that these reports be submitted each month at its regular meetings, and has always been desirous of coöperating with the School Committee in all efforts to promote the health and comfort of the teachers and children who occupy our school-houses.

It is hoped that these reports, which have been discontinued during the past two years, will be resumed. So far as is known to the committee the janitors have faithfully performed the duties assigned them.

CITY PROPERTY.

The following is a schedule of the property owned by the city at the close of the year 1888, special note being made of such as is not under the care of this committee :

Almshouse Buildings.

At foot of Tannery street, Ward 5, with land as follows :

In Cambridge	14.242	Acres.
In Somerville	7.964	,,
In Arlington	1.	,,
	22.306	Acres.

The area of the land in Somerville does not include the salable lots laid out therein by this city. There is a stone ledge situated on the Almshouse land in Somerville. With the exception of the land in Somerville, which is mentioned elsewhere in this schedule under *City Lands (Salable)*, all this property is in the care of the Overseers of the Poor.

Cemeteries.

Cambridge Cemetery. Foot of Coolidge Avenue, containing $40\frac{8129}{10000}$ acres of land. Also, additional territory adjoining, on southeasterly side, purchased in 1885, containing $18\frac{765}{1000}$ acres, upland, and $6\frac{29}{100}$ acres marsh. Total $25\frac{55}{1000}$ acres. This land was formerly known as the Winchester Estate, and has been annexed to the City of Cambridge by Legislative enactment. The total area of the Cemetery lands, inclusive of this additional territory is $65\frac{8679}{10000}$ acres. (In charge of Board of Commissioners of Cambridge Cemetery. Included in their report.)

Burial-Ground. Garden Street, junction of North Avenue, containing 85,858 square feet of land. (Recently placed in charge of the Cemetery Commissioners.)

City Buildings.

Cambridge Public Library, new stone building in process of erection on land bounded by Broadway, Irving, Cambridge and Trowbridge Streets, and 135,666 square feet of land. (The building now being erected and the land were included in the recent donations of Mr. F. H. Rindge, the entire cost being borne by him.)

Ward One Building, Brattle Square, and land, 16,153 feet.

Central Square Building, junction Western Avenue and Green Street, and 13,028 feet of land.

City Building, North Avenue, near corner Russell Street, comprising Engine House No. 4, Police Station 5, and Ward Room for Ward 5, and land included in Engine House lot.

City Hall, Main Street, corner Pleasant Street, and 12,881 feet of land.

City Stables, Norfolk, Hampshire and Tremont Streets, and 72,661 feet of land. (In charge of Committee on Roads and Bridges.)

Police Station, Norfolk Street, on City Stable lot.

City Lands (Salable).

Lot on Portland Street, east side, north of Engine and Hook and Ladder House, containing 18,011 square feet.

Land on the south side of Broadway, West Somerville, formerly part of Cambridge Almshouse land, divided into lots according to city plan, dated April 10, 1884, as follows:

On *Endicott Avenue*, so called, northwest side. Lots 76, 83, 92, 99, 108, 124	30,000 Feet.
On *Farragut Avenue*, so called, southwest side. Lots 100, 107, 116, 123	20,000 Feet.
On *Farragut Avenue*, northeast side. Lots 90, 101, 106, 117, 122	25,000 Feet.
On *Garrison Avenue*, so called southwest side. Lots 54, 57, 70, 73, 86, 89, 102, 105, 118, 121	50,000 Feet.
On *Garrison Avenue*, northeast side. Lots 56, 71, 72, 87, 88, 103, 104, 119, 120	45,000 Feet.
Total	170,000 Feet.

Lot on Cambridge Street, north side, between Marion and Harding Streets, containing about 5,000 feet.

City Lands (Reserved for Use).

Land on Norfolk Street, opposite city stable-yard, purchased in 1887, containing 39,600 square feet (in use by the Street Department).

City Hall Lot, on Main, Inman, Bigelow Street, purchased in

1888, for the purpose of erecting a City Hall thereon, containing 48,464 square feet. (The City Hall is to be erected and given to the city by Mr. Frederick H. Rindge.)

Lot on Pilgrim Street, north side, containing an area of 23,700 feet, with buildings thereon belonging to the Sewer Department, the land being in use by that department.

Lot on Auburn Street, south side, between Brookline and Sidney Streets, with buildings thereon belonging to the Cambridge Water Works. This lot is used by the Water Works Department and has an area of 33,300 square feet.

Lot on River and Blackstone Streets, and private way known as Daye Avenue, formerly the river basin of the Mill Pond. This is in charge of the Street Department, and is partially filled. When filled to grade it will be used as a wharf. The area is included in that of the Mill Pond lands, elsewhere mentioned in this report.

City Flats.

Flats, opposite City Wharf, Main Street, south side, opposite junction with Harvard Street; in all, 162,379 square feet.

Commons and Public Squares.

Cambridge Common. Garden Street, North Avenue, and Waterhouse Street. Area, 370,785 feet.

Public Square. Between Waterhouse Street and North Avenue. Area, 13,180$\frac{7}{10}$ feet.

Arsenal Square. Garden and Chauncey Streets and Concord Avenue. Area, 3,189 feet.

Public Square. Between Waterhouse Street and Garden Street. Contents, 363 feet.

Public Square. Between Holmes Place and Cambridge Street. Contents 20,956 feet.

Public Square. North Avenue, corner of Kirkland Street, on south corner. Contents, 23,074 feet.

Public Square. North Avenue, corner of Kirkland Street, on north corner. Contents, 33,357 feet.

Public Enclosure. Junction of Arrow and Main Streets, containing 872 feet.

Broadway Park. Broadway, corner of Norfolk Street. Contents, 107,181 feet.

Fort Washington. Waverly Street. Contents, 42,123 feet.

Public Square. Junction of Pleasant and River Streets. Contents, 1,569 feet.

Hastings Square. Brookline, Chestnut and Henry Streets. Area, 29,999 feet.

Dana Square. Lake, Magazine, Lawrence and Niagara Streets. Area, 33,531 feet.

Winthrop Suare. Boylston, Winthrop and Mount Auburn Streets. Area, 10,236 feet.

Engine-Houses.

House No. 1, Eliot Square, corner Mount Auburn Street, included with Ward 1 Building.

House No. 2, Main Street, near Winsor, and land, 3,150 feet.

House No. 3, Gore and Fourth Streets, and land, 4,220 feet.

House No. 4, North Avenue, near corner Russell Street, and land, 6,315 feet.

House No. 5, Hampshire Street, corner Inman and land, 6,000 feet.

House, Hook and Ladder No. 2 and Engine House, Portland Street, corner of Thorndike Street, extended, and 11,931 feet of land.

Gravel Pit.

Gravel Pit, in rear of Concord Avenue, southerly side, near Adams Street, containing 277,017 feet. (In charge of Committee on Roads and Bridges.)

Mill-Pond Property.

Old Mill-site and Basins. River Street, near Brighton Bridge, and upper and lower basins on River Street, Putnam and Western Avenues, comprising an area of 305,690 feet or about 7 acres.

The city is now building a wharf on the northeast bank of Charles River, which will ultimately include the entire area of the Mill-Pond basin between Blackstone Street and the river. This work is in charge of the Street Department, which will use the wharf when completed.

School-Houses and School-House Lands.

Allston, Boardman Street, 15,193 feet of land.

Agassiz, Oxford Street, corner Sacramento Street, 19,689 feet of land.

Boardman, Winsor Street, corner School Street, 10,018 feet of land.

Bridge, Pioneer Street, Lower Port, 4,646 feet of land.

Corlett, Holworthy Street, and 10,000 feet of land.

Cushing, Cushing Street, nearly opposite Locust Street, 14,788 feet of land.

Dana, Centre Street, and 14,317 feet of land.

Dunster, Concord Avenue, near Sparks Street, and 10,000 feet of land.

Felton, Amory Street corner Sumner Street, and 15,090 feet of land.

Gore, Gore Street, between Third and Fourth Streets, and 9,900 feet of land.

Gannett (old), Columbia Street, between Lincoln and Cambridge Streets, and $8{,}802\frac{7}{10}$ feet of land.

Gannett (new), Jefferson Street, and 14,934 feet of land.

Harvard, Broadway, corner Inman Street, and 20,494 feet of land.

High School. Fayette Street, Antrim Street, and Broadway and 37,828 feet of land.

Holmes, Hilliard Street, and 11,182 feet of land.

Lassell, Charles Street, near Sixth, and 10,000 feet of land.

Latin, Lee Street, near Harvard, and 10,000 feet of land.

Lowell, Lowell Street, near Mount Auburn Street, and 12,033 feet of land.

Manual Training, north side of Broadway corner of Irving Street, and about 73,128 square feet of land. (The building now in process of erection and land for this school were included in the recent donations to the city by Mr. Frederick H. Rindge, the entire cost being borne by him.)

Mason, Front Street, corner Jennings Court, and 10,000 feet of land.

Otis, Otis Street, between Fifth and Sixth Streets, and 8,270 feet of land.

Peabody, Linnæan Street, corner of Avon Street, and 21,813 square feet of land. (This building is not yet completed.)

Putnam, Otis Street, corner Fourth Street, and 11,900 feet of land. (Including additional land recently purchased.)

Quincy, Mason Street, corner James Street, and 8,469$\frac{3}{10}$ feet of land.

Reed, Reed Street, Ward 5, and 12,000 feet of land.

Riverside, Putnam Avenue, Ward 1, and 11,198 feet of land.

Sargent, Broadway corner Winsor Street, and 9,995 feet of land.

Shepard, North Avenue, near Russell Street, and 14,755 feet of land.

Stearns, Harvard Street near Prospect Street, and 10,050 feet of land.

Tarbell, Grigg, Howard and Magee Streets, and 19,500 feet of land.

Thorndike, Thorndike Street, corner Sixth Street, and 10,027 feet of land.

Washington, Brattle Street, corner of Farwell Place, and 14,951$\frac{1}{2}$ feet of land.

Webster, Upton Street, and 25,839 feet of land.

Wellington, Columbia, corner of Lincoln Street, and 18,870 feet of land.

Willard, Lake, Lawrence, and Niagara Streets, and 20,079 feet of land.

Wyman, Spruce Street, corner Groveland Street, and 14,346$\frac{8}{10}$ feet of land.

English High School House Lot, on Broadway, Trowbridge and Ellery Streets, containing about 73,350 square feet. (This lot is included among the recent donations of Mr. Frederick H. Rindge. The city will erect a High School Building thereon during the year 1889.)

Surrendered Estates.

These estates were surrendered to the city under the provisions of the statutes relating to low-land filling.

The following are all that remain unsold.

This list gives by whom surrendered and location of property.

CAMBRIDGE STREET DISTRICT.

Nourse, Susan M. Porter and Jefferson Streets. Lot of land 3,578 feet, Porter Street.

WASHINGTON STREET DISTRICT, SOUTH DOCK, AND SOUTH CANAL.

Bent Heirs. Dock and Sixth Streets. West lot containing 5,959 feet.

Tax-Title Estates (Salable).

The following described estates were conveyed to the city by persons who had purchased them at auction sales by the Collector of Taxes, and the city has taken legal possession of the same.

Lot on Broadway, west corner of Sixth Street, containing 17,517 feet.

Lot on Second Street, east of Conlan's Court, containing 26,400 feet.

Lot on Hunting Street, west side, adjoining land late of Melley, containing 2,709 feet.

Lot on Spruce Street, near railroad, adjoining land of McSweeney; area undetermined.

Land on Walden Street, southeast of land of Darling, southwest of land formerly of Saunders; area 16,635 square feet.

WHARVES AND LANDINGS.

Public Landing, foot of Bath Street; area unknown. *Gerry's Landing*, so called, south of Mount Auburn Street; area unknown. Each has a frontage of 30 feet on the river.

City Wharf, Main Street, opposite Harvard street, 9,400 feet.

Water Works Property.

Kingsley Park, opposite Lexington Avenue, between the Fitchburg Railroad and Fresh Pond, including the old Engine House lot; containing 300,000 square feet.

Tudor Park. Between Fresh Pond drive and Watertown Branch Railroad, containing 57,312 feet.

Lands Bordering on Fresh Pond, partly taken and partly acquired by purchase; containing an area of 2,707,308 square feet.

Lands Bordering on Fresh Pond (additional), comprising three estates taken by the Water Board under the provisions of Chapter 137, Acts of 1888. No settlement has been made with the late owners of these lands, and the area is undetermined.

Lands Bordering on Little Pond. Area unknown.

New Engine House, opposite foot of Lexington Avenue, and 90,414 feet of land.

Reservoir, Reservoir Street, corner High Street, and 86,920 feet of land. All the Water Works property is in charge of the Cambridge Water Board.

Recapitulation of Areas.

Kind of Property.		Square feet.	Acres.
Almshouse lands, about		971,642.72	22.306
Cambridge Cemetery (original)		1,778,511.24	40.829
Cambridge Cemetery (enlargement)		1,091,395.8	25.055
Burial Ground, near Harvard Square		85,858	1.97
Occupied by City Buildings		250,389	
City Lands (Salable)		193,011	
City Lands occupied by Sewer Department		23,700	
City Lands occupied by Water Works		33,300	
City Land occupied by Street Department		39,600	
City Hall Land bought for new building		48,464	
City Flats		162,379	3.73
Commons and Public Squares		699,015.7	16.047
Occupied by Engine Houses		31,616	
Gravel Pit on Concord Avenue		277,017	6.359
Mill Pond Lands, about		305,690	7.018
Occupied by School houses		564,206	
School House Lot, Broadway		73,350	
Surrendered Estates, lands :—	Square ft.		
Cambridge Street District	3,578		
Washington Street	5,959		
Total in both districts		9,537	
Tax-Title Estates, four estates		63,261	
Water Works Lands at Fresh Pond		3,241,954	74.425
City Wharf, Main Street		9,400	
Total about		9,957,307.46	228.590

Schedule.

Of salable city lands, surrendered estates, and tax-title lands, included elsewhere in this report, with their appraisal: —

Lot on Portland Street, north of Engine House, 18,011 feet .	$4,502 75
Lot on Portland Street, south of Engine House, 31,643 feet .	7,910 75
Almshouse Land, Somerville, 170,000 feet	6,800 00
City Wharf, Main Street, Lower Port, 9,400 feet	7,000 00
Surrendered Estates, ...	2,324 40
Tax-title lands, about	10,000 00
City Flats, opposite City Wharf, 162,379 feet	8,000 00
	$46,537 90

Following is an appraisal of some of the city property hereinbefore classified. It does not include the lands recently donated to the city by Mr. Frederick Rindge, nor the buildings now in process of erection and unfinished. The figures represent the taxable value of the property, based upon estimates heretofore made by the assessors, and upon sales made from time to time of adjoining lands. Many of the valuations are the same as those of past years, although the taxable value of much of the property has somewhat increased.

The valuation of the various City Buildings and School Houses is based upon their cost, and is given for statistical purposes.

Appraisal of Real Estate.

Almshouse and Land	$45,000 00
Cambridge Cemetery	79,750 00
City Buildings, Land and Furniture	282,284 00
City Lands and Surrendered Estates, (salable)	24,737 90
City Land occupied by Sewer Department (on Pilgrim Street)	4,740 00
City Lands occupied by Street Department on Norfolk Street	9,900 00
City Lands, occupied by Water Works (on Pilgrim Street)	6,660 00
City Flats, 162,000 feet	8,000 00
Engine-House, Inman Square (and land)	12,000 00
Engine-House, on Portland Street (and land)	18,000 00
Gravel Pit, near Fresh Pond	4,000 00
Mill-Pond Lands	15,000 00
School Houses and Lands	716,000 00
Amount carried forward	$1,226,071 90

Amount brought forward	$1,226,071 90
Tax-title Lands	10,000 00
Wharf, Main Street, Lower Port	7,000 00
Total	$1,243,071 90

Respectfully submitted,

DANIEL E. FRASIER,
FRANK H. TEELE,
WILLIAM H. EVELETH,
EDWARD A. BINGHAM,
GEORGE E. CARTER.

Committee on Public Property.

REPORT

OF THE

SUPERINTENDENT OF PUBLIC BUILDINGS.

OFFICE OF THE SUPERINTENDENT OF PUBLIC BUILDINGS,
CITY HALL, CAMBRIDGE, DEC. 1, 1888.

To the Honorable City Council: —

GENTLEMEN: In compliance with the City Building ordinance I have the honor to submit my third annual report in relation to the construction, repairs, and improvements which have been made on the public buildings, owned by the city, during the year ending Nov. 30, 1888, under the direction of the Committee on Public Property. The principal expenditures have been as follows: the completion of a brick school-house located on Fourth Street, at a cost of $14,349.19. This structure is situated on the south side of the Putnam school building, and will form a wing to the one contemplated to be built, when it shall become necessary to enlarge, thereby causing the removal of the old building. Plans for the whole structure have been prepared by the architect for use whenever the City Council decides to complete the work. The Washington School-house situated on Brattle Street, Ward 1, has received needed improvements on its exterior and interior, at a cost of $980.78.

New plumbing has been placed in the basement of the Webster School-house, on Upton Street, Ward 4, at a cost of $2,030.00.

The Felton School-house situated on Amory Street, has received radical changes and extensive repairs which required an outlay of $627.76.

The wood-work on the exterior of seven school-houses has been painted during the year as follows:

Allston, Boardman, Corlett, Dunster, Holmes, Shepard and Webster, costing $1,341.00. A floating Public Bath-house has been completed at a cost of $2,322.81; during the past year it has been located near the River Street bridge.

A wooden building, measuring 12 feet wide, 24 feet long, and 7 feet 6 inches high, for the purpose of a shooting station, with a range of 200 yards, to be used for practice by the military companies of the city has been built on a lot of land bordering on Cushing Street, Belmont District, known as the Cider Mill Pond estate. This range reaches an embankment at about 625 feet distance to the south, in which (after excavations were made) enclosures were built for targets, signals, etc. These underground enclosures measure 40 feet long, 5 feet 6 inches wide, and 6 feet 6 inches high, and cost $825.00. The excavation and grading required for the purpose named was done by the City Engineer, at an expense of $196.00. Extra work and stock cost $44.75, which made the entire expense $1,065.75.

The new brick Peabody School-house located on Linnæan Street, at the corner of Avon Street, now in process of construction, was commenced in the month of August and is going forward with all due speed. At the present time it is receiving the roof and the interior work will be completed in the spring.

The exterior materials of this building are composed of pressed brick with Long meadow freestone trimmings, having a frontage of 91 feet on Linnæan Street, and 33 feet 4 inches on Avon Street, with an addition at its rear measuring 22 feet long by 10 feet 6 inches wide. It is three stories high above the basement. The plan for this structure contemplates its enlargement in the future when it shall become necessary, and gives the assurance that when entirely completed it will be one of the most artistic, attractive, and convenient school-houses in the city.

The contract price for this building was $21,824.00, and payments have been made to the amount of $5,000, leaving a balance of $16,824.00, which will be paid out of funds specially reserved for the purpose. In addition there has been paid to the architect for plans $300, leaving still due to his account

$354.72, making his full amount $654.72, which added to the amount of contract makes the sum of $22,478.72, being nearly the entire amount appropriated for the purpose which was $22,500.00. The adoption of a system for the heating and ventilation of this building is now receiving careful consideration from the committee, and the amount necessary to cover the expense will be brought immediately before the City Council for an appropriation. An additional appropriation of $550 will be required to provide for the fencing of the entire lot, and for the necessary grading around the premises with proper walks, etc.

The plans which are being designed for the new English High School building, to be erected on land donated to the city for that purpose on Broadway, between Trowbridge and Ellery Streets, are still in the hands of the architect under the supervision of the Committee on Public Property and the School Board, and are progressing towards completion.

The general condition of school-houses has required a considerable outlay during the year for preservation, comfort, and health, and they still require much care and expense in the same direction. An estimate of the necessary expense is hereinafter appended.

There are at the present time thirty-six school-houses, eighteen of brick, and eighteen of wood. The constant wear upon them demands prompt attention. The matters of first importance. and which are often among the greatest necessities, are the sanitary arrangements in these buildings; the placing of the drainage in proper condition; the heating and ventilation; leaky roofs to be made tight and kept so; the keeping of their exteriors well painted, not only for their appearance, but for preservation from decay; the keeping of chimney-tops strong and secure, while the interiors should not be neglected, receiving as they do continual exposure and wear. Prompt attention to all these matters is of the greatest importance, the expense of which cannot in all cases be accurately anticipated, so that the work of real importance sometimes suffers from delay on account of limited appropriations. The annexed table will show the amounts expended for repairs, alterations, etc., on each building belonging to the city.

Cost of School-House Repairs.

High School	$403 60
Latin School	82 09
Allston Grammar	764 44
Corlett Grammar	160 26
Harvard Grammar	239 65
Putnam Grammar	491 93
Shepard Grammar	573 67
Thorndike Grammar	193 44
Washington Grammar	980 78
Webster Grammar	661 58
Wellington Grammar	137 26
Agassiz Primary	312 72
Boardman Primary	425 97
Bridge Primary	109 37
Cushing Primary	124 68
Dana Primary	339 65
Dunster Primary	212 95
Felton Primary	627 76
Gannett Primary (new)	267 61
Gore Primary	49 92
Holmes Primary	213 01
Lassell Primary	110 21
Lowell Primary	167 63
Mason Primary	9 08
Otis Primary	197 64
Quincy Primary	39 41
Reed Primary	17 65
Riverside Primary	247 52
Sargent Primary	45 16
Stearns Primary	62 13
Tarbell Primary	125 86
Willard Primary	221 64
Wyman Primary	184 87
All Schools	25 24
Showing an aggregate expenditure on account of school-house repairs of	$8,826 38

Almshouse.

A two-story brick building has been completed on the almshouse estate for the purpose of a school-room, workshop, storage, and sundry other conveniences, at a cost of $4,965.00 for which a special appropriation was made. A wooden building to be used as a laundry has also been constructed; it measures 35 feet long by 17 wide, and one story high, well arranged with set tubs, and heated by steam. The cost of this building was $550, and was paid for from the almshouse appropriation.

Fire Department.

The brick building on Portland street for the use of the Hook and Ladder Truck No. 2 and for a reserve engine has been completed at a cost of $17,132.98.

A one-story brick building used as a coal station has been erected on land belonging to the city at the rear of the Boardman School-house, for the storing of coal for the steamers of the Fire Department. The expense of this building was $687.00

The lot of land on the corner of Inman and Hampshire Streets, east of Engine-house No. 5, has been enclosed by a picket fence. The cost of the same with painting was $92.00.

The miscellaneous repairs on the several engine-houses have been as follows:

Engine-house No. 1, Brattle Square	77 45
Engine-house No. 2, Main Street	104 13
Engine-house No. 3, Fourth Street	88 69
Engine-house No. 4, North Avenue	309 01
Engine-house No. 5, Inman Square	125 54
Chemical, Central Square	38 88
Hook and Ladder No. 1, Brattle Square	9 87
Hook and Ladder No. 2, Portland Street	120 38
	$873 95

Police Department.

The sanitary condition of the cells at Station 3, Fourth Street, has been improved by the introduction of water-closets incased with iron at a cost of $200.

The same arrangement has also been placed in the cells of Police Station No. 4, on North Avenue, at an expense of $85.

The amount expended on Police Stations for repairs has been as follows:—

Station No. 1, Brattle Square	$116 59
Station No. 2, Central Square	2 35
Station No. 3, Fourth Street	353 70
Station No. 5, North Avenue	185 11
	$657 75

Public Buildings.

Anticipating the new and more favorable conveniences which will exist within the next two years, following the erection and completion of a new City Hall, when the present building will be put to use for other purposes and the arrangement of Public Offices in the City Building in Central Square will be somewhat changed, the outlay upon these buildings during the past year, has been confined to ordinary repairs, without expenditures upon them for improvements which might otherwise have been made.

The amount expended for repairs has been as follows ;—

City Hall	$405 45
Ward 4 Building, Central Square	224 94
Ward 1 Building, Brattle Square	552 94
	$1,183 33

Following are the estimates of the probable cost for repairs which it will be necessary to make on the Public Buildings during the ensuing year. As is now apparent there will be required for ordinary repairs on school-houses, $8,301.00 as follows :—

Latin	$150 00
High	200 00
Allston	500 00
Harvard	195 00
Corlett	75 00
Putnam (old)	170 00
Shepard	220 00
Putnam (new)	166 00
Thorndike	512 00
Webster	400 00
Agassiz	150 00
Boardman	340 00
Bridge	100 00
Cushing	250 00
Dana	312 00
Dunster	150 00
Felton	280 00
Gannett (new)	200 00
Gannett (old)	65 00
Gore	190 00
Holmes	200 00
Lassell	110 00
Lowell	325 00
Mason	100 00
Otis	212 00
Amount carried forward	$5,572 00

Amount brought forward	$5,572 00
Quincy	205 00
Reed	275 00
Riverside	250 00
Sargent	400 00
Stearns	325 00
Tarbell	375 00
Wellington	250 00
Willard	150 00
Wyman	219 00
Washington	280 00
Total	$8,301 00

On City Buildings there will be required $2,000.00 as follows:—

City Hall Building	500 00
Central Square Building	600 00
Brattle Square Building	800 00
Ward Rooms	100 00
Total	$2,000 00

Fire Department.

The estimated appropriation to meet the necessary repairs and improvements for the ensuing year is as follows:—

Engine-house No. 1	180 00
Chemical Engine-house No. 1	175 00
Engine-house No. 2	105 00
Engine-house No. 3	223 00
Engine-house No. 4	200 00
Engine-house No. 5	110 00
Hook and Ladder house No. 2	115 00
Total	$1,108 00

Police Department.

Estimate for ordinary repairs:—

Station No. 1, Brattle Square	97 00
Station No. 2, Central Square	75 00
Station No. 3, Fourth Street	82 00
Station No. 5, North Avenue	100 00
	$354 00

Military Department.

The building provided for the purpose of a shooting station, with its sundry attachments, will add somewhat to the expense in the line of care and repair of the city buildings. The early advent of severely cold weather has prevented the completion of grading, which it was deemed best to postpone until spring, when a platform bridge to cross the pond, making a near approach to the butt will be required; for these and other expenses suggested, an appropriation of $250 will be necessary.

Bath-House.

The bath-house built by the city during the year for public use is city property which will call for additional expense. The use of this house through the past season has developed the necessity for painting the interior as well as the exterior to ensure preservation, both being severely exposed throughout the year. For this and sundry other work it will be necessary to appropriate $275.00

The estimates for the repairs and improvements on the City Buildings amount in the aggregate to $3,987.00.

The estimate for the school-house repairs amounts to $8,301.00. Special appropriation for the Peabody School-house fencing, grading, walks, etc. $500.00.

Additional expense will attend the preparation of the polling places in each of the voting precincts of the city to meet the requirements of the so-called Australian system of voting which goes into effect November 1, 1889. A request for an appropriation with the necessary amount will be brought to your attention at the proper time.

With the expenditures of the amounts herein suggested for repairs and improvements on the city buildings, they will in my opinion be placed in a condition entirely satisfactory to the city.

Respectfully submitted,

BENJAMIN H. STEELE,
Superintendent of Public Buildings.

REPORT

OF THE

INSPECTOR OF BUILDINGS.

OFFICE OF THE SUPERINTENDENT AND INSPECTOR OF BUILDINGS,
CITY HALL, CAMBRIDGE, December 1, 1888.

To the Honorable City Council:—

GENTLEMEN: In compliance with Section 5 of the City Building Ordinance, I have the honor to submit my third annual report in relation to the business of this department for the year ending Nov. 30, 1888.

The continued activity in building operations for the past year has been met by increased care and precaution applied in the methods of construction, and the provisions of the ordinance have been generally accepted and cheerfully complied with. The opposition encountered at the early stages of its introduction has well nigh subsided, and its application is now being received by the building community with a reasonable acquiescence.

By reference to the annexed tables it will be seen that there have been granted during the year 553 permits for building and for sundry purposes. Parties have complied with the ordinance in obtaining permits in advance with hardly an exception, and are generally anxious to consult in relation to requirements where doubt exists, and have evinced a desire and willingness to conform thereto.

The benefits derived by the method of issuing permits for building and for varied improvements are manifest, in that it gives the inspector a knowledge of all such work going on in the city, and furnishes an opportunity for his inspection and approval, besides being of advantage to the city, and also to the assessors, of having immediate information of the increased amount of property built, and of every alteration, however slight; it also places a responsibility on each builder for a proper conformity to the city's requirements as set forth in the building ordinances for safety and general security against fire.

The improved manner and increased care given in the construction of work must in the future result in a great benefit to our city, its buildings being largely constructed of combustible materials. Increased precaution has been applied in all instances of building to the carrying out of the newly adopted requirements for fire checks now called for in wooden structures (as they were previously required only for those of brick), tending thereby to prevent effectually draughts where in cases of fire danger formerly existed.

The foundations built have been generally satisfactory, and where they were not so parties have promptly conformed to instructions given them.

In the general work of this office, frequent applications have been received to examine buildings as to their safe condition, and where required parties have willingly acquiesced and promptly made them secure, which, to the inspector, has been exceedingly gratifying and prevented resorting to severe measures.

In regard to the 52d section of the building ordinance, which forbids the projecting of bay windows over the line of highways without first obtaining consent therefor from the board of aldermen, I would recommend that the ordinance be so amended that no such permission shall hereafter be given, as of late it has proved to be unfortunate. Parties may feel disposed, and with the best intentions, to adopt all precautions for public safety which may be required to prevent effectually the dripping of water from them upon the sidewalk, which in the winter season forms ridges of ice, thereby increasing the danger to public travel and for which the City in case of accident may be held liable; still it remains a fact that no effective remedy has yet been applied. There are also other reasons why the City should not allow such encroachments on the public streets, which appear obvious.

The annexed table will show the number and character of the alterations, where the services of the inspector of buildings have been required, in relation to public safety.

Building in dangerous condition	15
Dangerous chimneys	44
Wood work too near flues	28
Weak foundations	7
Violation of Ordinance	13
Services of State Inspector	2
Whole number	109

Table showing the number of permits granted in each ward for building, and the purport of the same.

	Wards.					
	1	2	3	4	5	Total.
Dwelling-houses in blocks	7	4	5	5	6	27
Single dwelling-houses	43	50	12	40	43	188
Addition to houses	20	34	8	37	15	114
Storage	6	11	8	12	10	47
Stables	7	11	6	9	11	44
Cellar walls	4	4	6	10	3	27
Stores	2	5	2	3	2	14
Factories		2	2	6	2	12
Alterations to buildings	1	5	2	4	2	14
Carriage houses		1	1	2	2	6
Offices		1	1	2	1	5
School houses	2				1	3
Churches				1	1	2
Addition to churches		1		1		2
Conservatories		1		1	1	3
Shops	3	2	2	4	3	14
Dormitory	1					1
Electric light station				1		1
Museum	1					1
Public library	1					1
Association building			1			1
Steam boilers	4	4	3	10	5	26
Total	102	136	59	148	108	553

Of the above permits 466 were for wooden buildings, 20 for brick or stone buildings, and 67 for sundry purposes, making a total of 553.

Those built of brick and stone are divided as follows: —

Association building	1
School-house	1
Museum	1
Dwellings	2
Storage and work-room	1
Storage	2
Dormitory	1

Coal station	1
Factory	2
Public Library	1
Stores and dwelling	4
Office	1
Industrial school	1
Storage and stable	1

Number of permits granted for each month : —

	1888.	1887.
December	40	25
January	10	16
February	20	11
March	46	45
April	78	64
May	64	50
June	60	74
July	52	52
August	55	53
September	41	58
October	43	43
November	44	35
Total	553	526

It is extremely gratifying to be able to present so favorable a report, and to show such satisfactory results as have arisen from the strict conformity to the City Ordinance on the part of the building community.

Year by year our mechanics more willingly abide by our building laws, finding such course not only more advantageous to themselves, but also conducive to the comfort and general safety of the public.

Respectfully submitted,

BENJ. H. STEELE,

Superintendent and Inspector of Buildings.

REPORT

OF THE

COMMITTEE ON SOLDIERS' AID.

THE Committee on Soldiers' Aid submits to the City Council its report for the year ending Nov. 30, 1888: —

The amount paid as regular State aid was	$9,036 00
The amount paid to indigent soldiers and sailors was . .	2,290 00
The amount paid to the agent employed in the examination of settlements, etc., was	480 00
Expenses of clerk (car-fare)	4 15
Carriage-hire for committee	1 75
Total	$11,811 90

The amount received from the Commonwealth was . . .	$10,844 00
The amount received from other towns and cities	72 00
The amount received on account of sundry authorized payments afterwards disallowed	63 50
	$10,979 50

There are now upon the State-aid list 181 persons, and upon the list of indigent soldiers and sailors 32.

All of which is respectfully submitted,

EDW. W. HINCKS,
S. S. SLEEPER,
P. ALLEN LINDSEY,
WM. T. NEILON,
D. E. FRASIER,

Committee on Soldiers' Aid.

REPORT

OF THE

CEMETERY COMMISSIONERS.

To the Honorable the City Council: —

THE Board of Commissioners of the Cambridge Cemetery respectfully submits its thirty-fifth annual report, the same being for the year ending Nov. 30, 1888.

The amount appropriated at the beginning of the year was as follows: —

Current expenses	$15,000 00
Receiving-tomb	4,000 00
Total	$19,000 00

Balance of appropriation unexpended, receiving tomb	$118 43

This balance was transferred to the appropriation for "Current Expenses."

The total amount of expenditures was	$18,985 64
Balance of appropriation unexpended	14 36

For a detailed account of expenses reference is made to the Auditor's report.

The receipts for the year have been as follows: —

Burial and tomb fees	$2,902 21
Lots and graves	3,101 26
Foundations and brick graves	1,088 54
Care of lots	3,520 04
Rent of house	229 94
Apples and hay	167 25
Wood	31 00
Junk and sundries	3 00
Interest on fund for perpetual care of lots	575 00
Total amount of receipts	$11,618 24

The estimated revenue was	$16,000 00
The actual revenue was	11,618 24
Deficit of revenue under estimate	$4,381 76

This deficiency is largely accounted for by the fact that the number of graves and lots sold during the present year has been exceedingly small, the receipts being $3,559.99 less than for the year 1887.

Number of lots prepared this year	21
Estimated value of same	$3,980 00
Number of lots graded (not finished)	46
Estimated value of same (when finished)	$14,950 00
Number of lots now ready for sale, old part 73, new part 65	138
Estimated value of same	$32,185 65
Single graves prepared	50
Estimated value of same	$1,000 00
Amount received for perpetual care in 1888	$2,300 00
Amount of fund for perpetual care of lots	$12,825 00
Number of interments this year	637
Total number of interments in cemetery	15,997

The average number of men employed during the year has been seventeen, and the quality and amount of work accomplished has been satisfactory, although the labor in many ways has been more severe than usual, owing to the high winds and the continuous rainy weather.

The mound at the entrance to the grounds, formerly covered by trees, has been laid out as a garden plot, with flowers and shrubs. Many avenues have been macadamized and graded, the paths repaired, and the general appearance of the grounds kept up to its usual standard.

The old burying-ground on Garden Street has received the necessary amount of attention. The whole ground has been thoroughly renovated, ornamental shrubs and trees have been set out, and in a few years the view of the unsightly buildings in the rear will be entirely shut out by a growth of shade trees.

For several years past the necessity for a new receiving-tomb has been urged. Early in the present year the City Council appropriated a sum for the erection of such a tomb, and it is now completed and ready for use. The site chosen is a commanding one, at the head of Maple Avenue, and the structure is specially adapted to the purpose of its construction and fitted with all improved appliances. A receptacle has been prepared in the capstone, and in it has been placed a sealed box, containing lists of the City Government, Cemetery Commissioners, samples of documents used in the conduct of the Cemetery affairs, and other papers of interest. The expense of constructing the tomb was $3,881.57.

The appropriation for this tomb was	$4,000 00
Amount expended	3,881 57
Balance unexpended	$118 43

We would again call the attention of the City Council to the need of a fire-proof vault, in which may be stored the books, records and other documents pertaining to the Cemetery. For several years past we have suggested the desirability of such a provision against loss from fire, or other causes, and the increasing quantity of records shows more plainly than ever the necessity that one should be provided.

The old gateway and fence at the entrance are rapidly decaying, and should receive prompt attention. In our last report we recommended the removal of the fence, and the continuation of the blue-stone wall, with stone-capping, to the Mt. Auburn property. Should this be done and a new gateway erected the appearance of the entire vicinity would be greatly improved.

WM. E. RUSSELL,
LEANDER GREELY,
JOHN F. O'BRIEN,
SILAS B. BUCK,
GEO. S. SAUNDERS,
CHAS. E. RAYMOND,
DAVID ELLIS.

Cemetery Commissioners.

REPORT

OF THE

CITY ENGINEER.

City Engineer's Office, City Hall,
Cambridge, December 1, 1888.

To the Honorable the City Council: —

The City Engineer herewith presents a report of the operations and expenses of the departments of engineering and sewers under his charge, for the year ending November 30, 1888.

Streets.

The paving of Main Street with granite blocks has been continued from Lafayette Square to Central Square. Estimates have been prepared for a further extension to Harvard square, and it is to be hoped that this improvement may be carried on to a speedy completion.

The southerly abutment of the Third Street Bridge is badly bulged. It is supported in a great degree by the piling of the bridge and may hold up for some time longer, but should be carefully watched in order to rebuild it before it falls.

The stone work of the sea-wall (except the front ballasting) on Charles river in front of the Mill Pond lot, is now completed. To finish the contract there still remains this ballasting and the enders and hard pine cap to be built.

Washington Avenue has been extended to Lambert Avenue.

Inman Street has been widened on its westerly side, between Main Street and a point near Austin Street.

Main Street has been widened at a point near Pearl Street, by taking a portion of land from the estate of Asa P. Morse. Also at the corner of Inman Street by taking land from the Cambridge Mutual Fire Insurance Company.

Vassal Lane has been laid out and widened from Sparks Street to Lake View Avenue, to a uniform width of forty feet.

Front Street leading to the new Harvard Bridge has been widened to Village Street and laid out and extended to the commissioners' line to a uniform width of ninety feet. Awards have been made for the damages thereon, some of which have been accepted. Most of the houses have been removed or cut off to the new lines. A contract has been entered into with the Boston & Albany Railroad to fill the street with good material, and the work is now well in hand. A new sewer has been laid and the old wooden one from Village Street westerly to the square has been taken up.

Winsor Street has been laid out and extended from Main Street to State Street.

Charles River Street has been laid out and extended from Mt. Auburn Street to Bow Street.

De Wolfe Street has also been extended from Mt. Auburn Street to Bow Street.

All of these lay-outs and extensions have been important and desirable improvements.

Streets have been laid out and accepted, as shown in the following table: —

Street.					Plan.		
Name.	From.	To	Length in feet.	Width in feet.	Date.	Made by	Accepted.
Charles River Street	Mt. Auburn Street	Bow Street	30.50	40	Dec. 9, 1887	City Engineer	Feb. 14. 1888.
De Wolfe Street	Mt. Auburn Street	Bow Street	77.00	40	Dec. 6, 1886	City Engineer.	Dec. 29, 1887
Front Street	Lafayette Square	Harbor Com'rs' Line.	3,114.00	90	Nov. 7, 1887	City Engineer	July 20, 1888.
Gray Street	Linnæan Street	Norton Street.	478.53	40	June 2, 1888	W. A. Mason & Son.	July 24, 1888.
Seckel Street	Winsor Street	Webster Avenue	276.90	30	Sept. 13, 1887	J. G. Chase	Dec. 23, 1887.
Vassal Lane	Lake View Avenue	Sparks Street	2,735.00	40	June 19, 1886	City Engineer	July 31, 1888
Washington Avenue	Present N'ly terminus	Lambert Avenue	92.80	50	June 28, 1882	City Engineer	May 10, 1888.
Windsor Street	Main Street	State Street	187.94	40	Dec. 6, 1886	City Engineer	Dec. 29, 1887.

Bridges.

No extensive repairs or rebuilding of bridges has been required during the present year. For the coming year the Sixth Street Bridge will require some extensive repairs. One of the draw-arms on the south side of the bridge is entirely broken off, and all the rest are more or less rotten, some of them nearly half off. One Samson post must be replaced, and a new fence is required, besides other smaller repairs and painting.

The River Street Bridge should have extensive repairs. While the superstructure is fairly good, the piling and foundation is entirely inadequate to carry the top. It is a question whether, in view of the proposed widening of the draw, as ordered by an act of the Legislature of 1888, it would not be a proper time to build an entirely new and wider bridge in place of the old one.

All the other bridges maintained in whole or in part by the City are in good condition, and will require only the ordinary repairs.

Harvard Bridge.

Work was commenced on this bridge early in the season, and fair progress has been made, though it is not expected that the work will be completed before July, 1889.

Sewers.

There have been constructed during the present year $2\frac{829}{1000}$ miles of sewers, making the total length of sewers in the City $80\frac{97}{100}$ miles.

The sewers constructed the past year are shown in detail on the accompanying table:

Sewers Constructed between Dec. 1, 1887, and Dec. 1, 1888.

LOCATION.			CONSTRUCTION.						Total Cost.
Street.	From	To	Built by	Material.	Size in inches	Man-holes	In-lets	Length in feet.	
Bath Street District	Waterhouse st.	Wallace street	City Engineer.	Brick	33x43	1	73	1085.3	‡$22,202 65
Belmont District	Mt. Auburn st.	Northerly	" "	"	32x41½	1	27	228.1	†3,316 41
Blackstone	River street	Northerly	" "	Akron pipe	10		7	119.4	145 32
Brattle	Hawthorn st.	Westerly	" "	" "	12x15		12	110.5	297 65
Broadway	Pelham street	Pioneer street	" "	" "	12		11	230.7	332 41
Cambridge (relaid)	Broadway	Ellery street	" "	Brick	48x54, 28x36				
Carlisle	Prospect street	Near Tremont street	" "	Portland & Akron pipe	10	1	12	226.7	224 96
Channing	Mt. Auburn st.	Northerly	" "	Akron pipe	12 and 10	1	40	528.4	600 90
Cherry	Main	Northerly	" "	Portland Cement pipe	10		10	174.7	156 36
Creighton St. and private lands	Richdale avenue Creighton street.	Near North avenue and Walden street	" "	Akron and Iron pipe	16, 15 and 10	3	72	1101.5	1,948 23
Flagg	End of old sewer	Easterly to near Putnam avenue	" "	Akron pipe	10	1	9	63.6	119 36
Florence	End of old sewer	Easterly to near Magazine st.	" "	" "	10	1	4	62.9	116 36
Foster Place	Foster street	Northerly	" "	" "	10	2	14	203.7	252 28
Foster	Sparks street	Easterly	" "	" "	10				
*Granite and Magazine	Pearl street Granite street	Magazine st. and Florence st.	" "	" "	12 and 10	3	69	930.3	1,448 51
Gray	Norton street	Near Linnæan street	" "	Portland pipe	10	2	34	443.7	371 66
Garden (see Bath st. District)	Waterhouse st.	Wallace street	" "						
Hammond	Gorham street	Near Carver street	" "	Portland & Akron pipe	12 and 10	2	51	641.7	713 33
Henry (see Waverly and Henry streets	Waverly street	Westerly	" "						
Inman	End of old sewer	Southerly to near Austin street	" "	Akron pipe	10		4	57.6	61 86
Irving (relaid)	Cambridge st.	Near Broadway	" "	Portland pipe	10				

*Built on piles between Pearl and Magazine Streets.

†Includes cost of 185.3 ft. relaid.

‡Includes $8,344.70 for portion built in 1887.

Sewers Constructed between Dec. 1, 1887, and Dec. 1, 1888 (Continued).

LOCATION.			CONSTRUCTION.						Total Cost.
Street.	From	To	Built by	Material.	Size in inches	Man-holes	In-lets	Length in feet.	
Kinnaird	Jay street	Easterly	City Engineer	Akron pipe	10	1	12	185.4	216 91
Lambert avenue	Raymond street.	Easterly	" "	Portland pipe	10	1	36	506.1	682 73
Lexington avenue	End of old sewer	Worthington street	" "	Portland pipe	15, 12 and 10	5	174	2302.2	3,342 03
*Main	Columbia street.	Inman street	" "	Akron pipe	15 and 12	4	146	1976.7	
Market	Bristol street	Easterly	" "	Portland pipe	10		8	104.7	77 11
Magazine (see Granite and Magazine streets)	Granite street	Near Florence street	" "						
McDonald (see Belmont District)	Mt. Auburn st.	Northerly	" "						
Portsmouth	Webster avenue.	Hampshire street	" "	Akron pipe	10	1	20	302.5	241 83
Raymond	Walden street	Near Bellevue avenue	" "	Akron & Portland pipe	12 and 10	1	43	598.7	854 92
Reservoir	End of old sewer	Northerly	" "	Portland Cement pipe	10	1	10	191.1	272 71
Richdale avenue	Near Lambert av	Near Creighton street	" "	Portland & Akron pipe	12 and 10	4	71	915.9	1,115 12
Sacramento	End of old sewer	Near North avenue	" "	Akron pipe	10		4	56.5	62 49
Vincent	Walden street	Near Lambert avenue	" "	Portland pipe	10	2	24	336.3	435 51
Waverly and Henry	Putnam avenue	Sidney street	" "	Akron pipe	15 and 10	2	63	915.2	1,216 98
Whittier	Walden street	Near Lambert avenue	" "	Portland pipe	10	2	24	336.8	435 51
						42	1084	14,936.9	$41,262 14

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* Maintenance.

Belmont District Sewer,

which was completed in the spring of 1887 as far as McDonald Street has received a further extension through McDonald Street to private lands of McDonald, and is now being built across said lands to Auburn Place. The amount expended on this extension to Nov. 30 is $3,316.41. It is desirable that a further extension be made early next spring to the Belmont District and that the whole of the District be sewered the coming season.

Bath Street Sewer.

This sewer was completed last year to Waterhouse Street, and the North Avenue section of the district has received great benefit from the extension; but the Shepard and Linnæan Street side has not derived much benefit from it; in consequence a further extension has just been made extending as far as Shepard Street. It is believed, however, that before the full benefit is received it will be necessary to extend the sewer to Linnæan Street, and possibly in a portion of the street itself, and this is recommended for the coming year.

Cambridge and Irving Street Sewers.

As recommended in my last report, these sewers have been rebuilt at a considerably increased depth at a cost of $9,340.60

Main Street Sewer.

A new sewer has been constructed in Main Street from Lafayette Square to Inman Street, at a very considerably increased depth. This was demanded to accommodate the new class of buildings which have recently been erected with deep cellars, many of which were below the bottom of the old sewer. This sewer is designed to take house drainage only, the storm water being taken by the old sewer. Branches have been provided, and the intention is to extend this system as required to other streets in the immediate vicinity. The cost of this sewer was $3,796.46.

Binney Street Sewer.

Some work has been done in strengthening the masonry of this sewer by building buttresses on the outside; also some in repairing the outlet and the ballasting, but much more remains to be done and the work should be continued in the spring.

Bridge Street Sewer Outlet.

The surroundings at the outlet of this sewer have been cleaned as usual; the City of Somerville paying its proportion of the expense. As the principal part of this work is in the dredging, there has been until this year a lively competition for it; but owing, it is supposed, to a collusion, among the dredgers, only one bid was received, and that at a very much increased rate. This we were forced to accept, and an additional appropriation of $800 was required to cover it.

The Board of Health have continued their investigations relating to the matter, but as yet I am not aware that any new conclusions have been arrived at, or anything done towards relieving the nuisance. It seems as though no relief could be reached until some scheme of metropolitan drainage is adopted and carried out.

Alewife Brook.

The usual cleaning of this Brook has been done, and very few complaints have been made. The suit threatened by the Henderson Brothers has not yet come to trial. This is another case for which I see no means of relief before the construction of the Metropolitan scheme.

Metropolitan Sewerage System.

It is understood that the Board of Health of the State, to whom this matter is referred, will report a scheme to Legislature of 1889. Copies of the plan proposed have already been submitted to the City authorities. So far as they have been examined and studied they seem to meet the conditions and requirements of the case. It is desirable that early action be taken in this matter, which is of vital importance to the health of the community.

New Stable and Work at the Yard.

Plans were prepared at this office for a new stable and proposals received, but none being within the amount appropriated for this purpose ($1,800,00), it was built by the day by the sewer department, and at an expense of $1,797.45. It meets a long-felt want of the department. A new fence has also been built, and a new arrangement of sheds made, a new derrick set up, and considerable filling done in the yard with part of the surplus from sewers built. It is desirable to turn the old locker and stable into a house and have the hostler live on the premises. This can be accomplished at a comparatively small expense, which is recommended.

APPROPRIATIONS AND EXPENDITURES.

For sewer construction	$26,000 00
Transferred to maintenance	1,500 00
	$24,500 00
Excess over estimated revenue	2,573 52
Total	$27,073 52
Transferred to other departments	4,284 85
	$22,788 67
Expended for sewers	22,709 88
Balance	$78 79
For sewer maintenance	$27,000 00
From sewer construction	1,500 00
	$28,500 00
Excess over estimated revenue	204 80
	$28,704 80
Expended for sewers, maintenance	28,385 63
Balance	$319 17

SPECIAL CONSTRUCTIONS.

Bath Street sewer appropriation	$22,000 00
Received	279 00
	$22,279 00
Expended in 1887	8,344 70
	$13,934 30
Received	30 00
	$13,964 30
Expended in 1888	13,857 95
Balance	$106 35

FRONT AND ALBANY STREET SEWERS.

Appropriation	$5,000 00
Expended to Nov. 30	535 84
Balance	$4,464 19

Water Works, Stony Brook.

Plans and specifications have been prepared for a keeper's house at Stony Brook, the building occupied for an office during the construction of the works being used for that purpose. A small stable and connecting shed were also added, the whole making a neat and suitable structure. The grounds have been graded, and a neat fence has been erected surrounding the buildings on the adjoining streets.

A neat iron fence has been erected across the foot bridge, and upon the masonry coping around the gate house.

Water has flowed over the overfall of the dam 244 days and has caused a wastage of between 6,000 and 7,000 million gallons in addition to what has been drawn to Fresh Pond (which has been kept nearly full most of the time), or wasted at the 36-inch blow-off or waste-gate.

A small wooden gate-house has been erected over the 36-inch blow-off gate at Charles River, and the gate has been fitted to work with cranks from the floor.

Hearings have been had before the commissioners appointed by the Court for this purpose on most of the land cases, and settlements have been made in nine of them. Others are still pending.

One of the water cases, that of William Roberts in the case of his mill has been heard. An award has been made which we understand is not satisfactory to him, and that he intends making an appeal to a jury.

Much time has been required in attendance at these hearings and preparation for them. There are several others to be heard.

Fresh Pond.

A large amount of work has been done at Fresh Pond under the direction of the Superintendent on the improvement of its borders, fencing the lines of the property acquired, building retaining walls, sloping and sodding the banks, setting out trees and other work, all of which tend to beautify the pond and its surroundings, and all tending ultimately to make this one of the most beautiful spots in the vicinity of Boston. Several estates on the borders have been taken under the Act of 1888, and the City now controls most of the land around the pond.

The nooks which have been cut off from time to time should be filled as rapidly as funds will permit, and drainage should be provided for them at once, as much objectionable drainage is received in them from Richardson's pond and vicinity. Levels have been taken for this purpose, and work has been commenced; but the high water on the meadows (the only place now available) has prevented the work for the present.

At the pumping station a new ten-million water end has been put upon the No. 2 Worthington pump; it has already been started, and has thus far worked very satisfactorily.

Cemetery.

The usual demands for work at the Cemetery have been met. Plans and specifications have been furnished for a new receiving-tomb containing 46 crypts. This work was performed under a contract with Mr. Augustus Lothrop of Boston in a very satisfactory manner, at a cost of about $3,557.00.

Rifle Range.

The City being required by law to furnish a range for the military companies of the City, one has been established on land owned mostly by the City on Cushing Street, and known as the "Cider Mill Pond" lot. A small piece in addition being necessary, it was secured from Miss Harriet Stone, of Belmont, on satisfactory terms for a period of five years. The range is 200 yards, and is fitted with all the latest improvements. The first use of it was made on Thanksgiving day, and proved quite satisfactory. The cost was about $1,000. Plans and specifications and superintendence of the grading for the same were furnished from this office; the remaining work was performed under a contract with Mr. William E. Rose in a satisfactory manner.

Office.

The requirements of the office are continually increasing, and the demands have been met with reasonable promptness. I desire here to acknowledge the willing and cheerful manner in which my wishes and requirements have been carried out by the assistants, and the prompt and efficient manner in which the duties have been performed.

The appropriation for engineering was	$7,600 00
From Water Works	1,000 00
Revenue	10 00
Additional appropriation to balance	57 20
	$8,667 20
Expended	8,667 20

Respectfully submitted,

WILLIAM S. BARBOUR,
City Engineer.

REPORT

OF THE

SUPERINTENDENT OF STREETS.

To the Honorable City Council: —

The undersigned asks leave to submit for your consideration, his fifth annual report.

The appropriation for Street Department (repairs and the collection of ashes), for the financial year, ending Nov. 30, was	$101,054 25
Amount expended	101,054 25

This amount has been expended for the necessary labor, materials, and utensils, employed in grading and repairing streets, and for collecting ashes. For the different items, see the Auditor's report.

The streets, with few exceptions, are in fair condition, considering the unfavorable weather we have had) and I believe that this year the weather has been more unfavorable for the wear and care of streets, than any year in the memory of any living man) ; but are not what they should be for a city like ours; before they are, a large amount of money must be expended on them, and I would recommend an increased appropriation the coming year.

I most earnestly recommend that a ledge of suitable size and quality and on the line of some railroad be procured, and that a proper machine, with the necessary appliances for crushing the stone, be placed there, in order to furnish a sufficient supply of cracked stone, for the proper construction and care of the streets ; also that suitable lots of land be obtained, at convenient points for distribution, in different parts of the city, so that a supply of cracked stone may at all times be within easy reach of any section of the city, where it may be needed.

The amount of gravel available for use in this Department is very limited, and even that is of very poor quality; it is, in my judgment, simply a waste of money to put it on a street, where there is any considerable amount of travel. So far as we can see, all the gravel fit for street or sidewalk paving, has been taken from our banks and some steps should be taken immediately, looking toward a new and generous supply.

The following streets have been graded wholly or in part during the present year. This list includes the extension of Winsor, De Wolf, and Charles River Streets:—

Austin Street, from Columbia Street to Main Street.
Amory Street.
Beacon Street, from Cambridge Street to Somerville line.
Bigelow Street, full length.
Bolton Street, full length.
Boylston Street, full length.
Brattle Street, from Boylston Street to Mount Auburn Street.
Broadway, from Main Street to Portland Street.
Charles River Street, from Mount Auburn Street to Bow Street.
Columbia Street, from Main Street to Cambridge Street.
Concord Avenue, from Waterhouse Street to Wyeth Street.
Craigie Street, full length.
De Wolf Street, from Mount Auburn Street to Bow Street.
Fifth Street, from Winter Street to Gore Street.
Fifth Street, from Vine Street to Charles Street.
Fourth Street, from Bridge Street to Winter Street.
Garden Street, from North Avenue to Wyeth Street.
Gore Street, full length.
Grant Street, from No. 14 to Banks Street.
Harvard Square and Harvard Row.
Hilliard Street, about one-half its length.
Inman Street from Harvard Street to Austin Street.
Kinnaird Street, from Western Avenue, about 400 feet.
Kinnaird Street, from Howard Street to Putnam Avenue.
Lake Street, from Pearl Street to Magazine Street.

Lee Street, from Broadway to Harvard Street.

Lexington Avenue, about 750 feet.

Mount Auburn Street, from Boylston Street to Putnam Avenue.

Mount Auburn Street, from Cemetery Gate to Auburn Place.

North Avenue, from Porter's Bridge to Alewife Brook, except North side, from Meacham Street to railroad.

Otis Street, from Third Street to Seventh Street.

Prospect Street, from Cambridge Street to Austin Street.

Seckel Street, from Winsor Street to Webster Avenue.

Sidney Street, from Front Street to Franklin Street.

Soden Street, full length.

Summer Street, full length.

Suffolk Street, full length.

Thorndike Street, from First Street to Second Street.

Third Street, from Gore Street to Spring Street.

Trowbridge Street, from Main Street to Harvard Street.

Vine Street, from Fifth Street to Sixth Street.

Washington Street, from Winsor Street to Columbia Street.

Washington Avenue, from Linnæan Street to Hillside Avenue, and extension.

Winsor Street, from Main Street to State Street.

Winthrop Street, from Boylston Street to Elliott Street.

Winthrop Place, from Mount Auburn Street to Winthrop Street.

William Street, from Pearl Street to Magazine Street.

And other streets, too numerous to mention, have been patched more or less.

For streets accepted during the year, see City Engineer's report.

Steam Street Roller.

In May, 1887, the city purchased a steam street roller, of the Aveling and Porter make, of 17 tons capacity when loaded.

Of this machine, I said in my report last year. "It has more than satisfied our anticipations and is a great accession to the department; so well pleased are the Committee on Roads and Bridges, and myself, with the service rendered by this one, that I shall ask the incoming City Government for an additional appropriation for another of smaller capacity, feeling satisfied that it will be a paying investment for the city."

This year I would renew this recommendation, in which I am joined by the present Committee on Roads and Bridges.

Sea Wall at Mill Pond.

The appropriation for this work was	$4,500 00
Amount expended	3,426 60
Balance unexpended	$1,073 40

This wall, which was provided for by the City Council of last year, is built for the purpose of supplying a wharf for this department. The sea wall has been completed and partially ballasted; the balance unexpended will be required for ballasting, capping, piling, cementing, etc., as specified in the contract.

Paving.

The appropriation for paving was	$33 263 21
Amount expended	33.235 88
Balance unexpended	27 33

The amount has been expended in paving Main Street, from Kennedy's crossing to the west line of Central Square and the various sidewalks and gutters where edgestones were set and bricks were laid, beside a large amount of necessary repairing and overhauling of sidewalks and gutters, where edgestones had been set and bricks already laid and other necessary repairs to paving already done. A contract has already been awarded for a sufficient number of granite paving blocks to pave Broadway from Main Street to Brewery Street. The present Committee on Roads and Bridges joins me in recommending that this work be done, and in their judgement and mine also there is no spot where it is needed more.

North River Flagging Stones, for Street Crossings.

There has been purchased the present year, 2,824 square feet of North River flagging stone, at an expense of $1,113.26.

Every piece of this has been used for the purpose named, and we shall ask the incoming City Government for a like amount for the ensuing year.

Street Watering.

The appropriation for Street Watering was	$16,052 84
Amount expended	16,033 35
Balance unexpended	$19 49

This amount was expended for labor watering the streets, repairs to the carts and the incidental expenses of this department. Three new carts were also purchased out of the above appropriation, at a cost of $1,050.00 All of the carts are in a fair condition, but will require some repairs the present winter.

Bridges.

The appropriation for Bridges was	$3,000 00
Amount expended	2,777 28
Balance unexpended	$222 73

For this department, a larger appropriation will be required this year. By an Act of the Legislature of 1888, the cities of Boston and Cambridge are required to widen the draws of the the following bridges, Brookline Street, River Street, Western Avenue and Boylston Street.

This will entail an expenditure on the part of this city, of about $15,400.00, this amount being one half of the cost, as estimated by the City Engineer of Boston.

In addition to this, our City Engineer informs me that it will be necessary to rebuild Sixth Street and River Street bridges; for estimated expense of the same, see City Engineer's report.

The usual amount will be required for the ordinary running expenses of this department.

Shade Trees and Public Grounds.

The appropriation for this department was	$4,630 60
Amount expended	4,630 60

This department is in fair condition, but I think that a liberal appropriation should be made to allow for more generous care of the trees and to provide for the removal of the decayed or dead ones, which appear each year.

Schedule of Property of the Street Department.

Thirty-three horses	$6,700 00
Thirty-six watering carts	11,295 00
One engine and stone crusher	3,500 00
One steam road roller	6,000 00
Five horse road rollers	1,500 00
Twenty-six carts	2,600 00
Thirty sets of harness	800 00
Eight wagons	640 00
Twenty-nine sleds and snow ploughs	1,875 00
Tools and stable furniture	913 00
One hay rack	100 00
One caravan	150 00
One lawn hand cart	80 00
Six lawn mowers	90 00
Three pungs	100 00
Two street sweepers	500 00
Garden hose	15 00
Six hundred tons of gutter stone	1,200 00
Twenty-two thousand block "	440 00
One hundred tons of crossing blocks	250 00
Three hundred and twenty feet straight edgestone	150 00
One hundred, thirty-four feet circle edgestone	94 00
	$38,992 00

I desire in conclusion to express my thanks to the members of the Standing and Joint Committees for their generous assistance and direction during the past year; to his Honor, the Mayor for his ever ready valuable advice and encouragement, and to the other members of the City Council for their indulgence and approval.

I am also indebted to the heads of the different departments for their ready assistance, suggestions and advice, when needed.

Respectfully submitted,
JOHN McSORLEY,
Superintendent of Streets.

REPORT

OF THE

COMMISSIONER ON WEST BOSTON, CANAL AND PRISON POINT BRIDGES.

The Commissioner for West Boston, Canal and Prison Point Bridges submits for himself and associate the eighteenth annual report of the matters pertaining to West Boston and Canal Bridges, and the twelfth annual report on Prison Point Bridge.

West Boston Bridge.

Only the usual and most necessary repairs have been made. The condition of the southerly sidewalk from the draw to the solid filling at the Cambridge end is so poor that it will be necessary to rebuild it next year, and to renew a part of the floor plank. It will also be necessary to repair the adjoining roadway, and to put new caps to all those bents of piles which were not recapped in 1886, about fifty bents in number.

The piles in and near the channel and under the draw have been examined by a diver and found in good condition below low water, and uninjured by the pile worm.

The earth filling of the Charles River Embankment, next the bridge, was originally supported by sheet piling, which was in turn supported by the bridge.

The bridge had not sufficient strength in this direction and was slowly yielding under the pressure.

The Park Commissioners of Boston have deposited a sufficient amount of gravel filling under this portion of the bridge to make a suitable slope from the bulkhead and to sustain the bank. The bank of gravel is protected by rip-rap. The draw will need a considerable amount of repair during the coming year, the under floor, the ends, and end bearings being in poor condition.

No settlement has yet been made with the Park Commissioners for the property taken from the bridge for the embankment.

Permission has been granted the West End Street Railway Company to erect poles and wires for running their cars on the bridge by electricity, using the overhead wire system.

Canal or Craigie's Bridge.

The pier upon which the draw tender's house stands, has been replanked during the year, and the usual repairs have been made upon the draws. It will be necessary to replace a portion of the floor of this bridge the next year, as it has become decayed to a considerable extent.

The paving blocks on a large portion of the roadway will require resetting next year.

The piles under the oldest part of the bridge, some of which were driven in 1808, have been examined by a diver and found in good condition below low water and have not been injured by the pile worm. A considerable number of the older piles are in poor condition above water, and will require repair from time to time.

Prison Point Bridge.

The draw has been repaired so as to last till next spring; then it will have to be replanked and sheathed.

The following communication has been received from the Secretary of War: —

WAR DEPARTMENT,
WASHINGTON, D. C., Dec. 6th, 1888.

To the Commissioners on West Boston, Canal and Prison Point Bridges:—

TAKE NOTICE THAT:

Whereas, the Secretary of War has good reason to believe that the bridges across the Charles River, known as West Boston Bridge and Canal or Craigie's Bridge and controlled by you, are obstructions to the free navigation of the said Charles River, which is one of the navigable waters of the United States, by reason of insufficient height above mean low water, insufficient width of spans, narrow draw openings, and faulty construction and that the navigation through or under them is rendered difficult for the passage of steamboats and other water craft, and

Whereas, to the first day of January, 1891, is a reasonable time in which to alter the said bridges so as to render navigation through or under them free, easy and unobstructed:

Now, therefore, in obedience to, and by virtue of the ninth and tenth sections of an act of the Congress of the United States, entitled: "An act making appropriations for the construction, repair and preservation of certain public works on rivers and harbors, and for other purposes," which took effect August 11th, 1888, I, William C. Endicott, Secretary of War, do hereby notify the said Commissioners on West Boston, Canal and Prison Point Bridges to so alter the said bridges as to render navigation through or under them free, easy and unobstructed and prescribe that said alteration shall be made and completed on or before the first day of January, 1891.

[Signed,] WM. C. ENDICOTT,
Secretary of War.

Statement of the number of times the draws on the West Boston, Canal and Prison Point Bridges have been opened, and the number of vessels which have passed through during the year.

Date.	West Boston Bridge.		Canal or Craigie's Bridge.		Prison Point Bridge.	
	Number of Draw Openings	Number of Vessels Passed Through.	Number of Draw Openings	Number of Vessels Passed Through.	Number of Draw Openings	Number of Vessels Passed Through.
December, 1887	241	332	254	284	27	34
January, 1888	22	34	42	49	7	10
February, "			18	19		
March, "	11	14	80	91	15	18
April, "	140	205	251	265	24	28
May, "	200	296	370	379	22	27
June, "	286	429	400	420	43	51
July, "	273	424	413	440	35	42
August, "	383	627	493	525	39	48
September, "	252	383	349	373	48	54
October, "	232	351	339	345	33	39
November, "	157	244	310	324	24	31
Total	2,197	5,539	3,319	3,514	317	382

The cargoes in vessels that passed up Charles River, through West Boston draw during the year are as follows:—

Coal, 120,952 tons; wood, 2,803 cords; feet of lumber, 50,044,000; paving stones, cubic yards, 500,300; granite, 19,041 tons; lime, 11,385 barrels; cement, 4,669 barrels; gravel for roofing, 1,668 tons; piles, 90,335 feet; sand, 1,203 tons; laths, 3,508,000; bricks, 1,788,000; flagging stone, 140 tons; shingles, 775,000.

WILLIAM J. MARVIN,
Bridge Commissioner for Cambridge, and Harbor Master on Charles and Miller's Rivers and Broad Canal.

Statement of traffic on Saturday, Dec. 8th, 1888, between the hours of 6 A. M. and 7 P. M.

Number of teams of all kinds and passengers crossing West Boston Bridge:—

Teams to Boston	1,394
Foot Passengers to Boston	2,397
Teams to Cambridge	1,361
Foot Passengers to Cambridge	1,875
Horse Cars both ways	1,166
Passengers both ways	27,138

Number of teams of all kinds and passengers crossing the Canal or Craigie Bridge:—

Teams to Boston	4,120
Foot Passengers to Boston	4,400
Teams to Cambridge	3,530
Foot Passengers to Cambridge	3,800
Horse Cars both ways	481
Passengers both ways	9,001

Number of teams and passengers crossing Prison Point Bridge:—

Teams both ways	2,045
Foot Passengers both ways	1,390

REPORT

OF THE

CAMBRIDGE WATER BOARD.

To the Honorable City Council of the City of Cambridge: —

The Water Board herewith submits to you its twenty-fourth annual report, being for the year ending November 30th, 1888.

Total Cost of the Water Works.

Cost of the Water Works, November 30th, 1887, as per last year's report	$2,436,496 50
Expended during the year ending November 30th, 1888	103,283 50
Making the total expenditure	$2,539,780 00

Water Bond Account.

Whole amount of bonds issued	$2,439,900 00
Amount paid from the Sinking Fund . . .	716,400 00
Leaving unpaid Water Loan	$1,723,500 00
From this deduct the present value of the Sinking Fund for water debt, as per the Trustee's account	753,942 00
Leaving the Water Loan yet to be provided for by the Sinking Fund	$969,558 00

Statement in brief of the transactions in connection with the Water Works for the year ending November 30th, 1888.

General Construction Account.

RECEIVED.

From excess of rates, fines, etc .	$24,256 84	
From sale of auxiliary engine and boiler	620 00	
		$24,876 84

EXPENDED.

Amount expended on general construction	$24,876 84

Stony Brook Construction Account.

RECEIVED.

Balance of appropriation of 1887	$51,070 92
From Water Bonds issued	25,000 00
Premium on the sale of the same	2,368 00
Sale of tickets to contractors, etc., Boston to Roberts'	9 00
	$78,447 92

EXPENDED.

On Stony Brook account	$63,006 09
Balance unexpended carried to new account .	15,441 83
	$78,447 92

Fresh Pond Land Purchase, etc.

RECEIVED.

Balance of appropriation of 1887	$16,606 70
Sales of apples, etc.	62 65
	$16,669 35

EXPENDED.

For purchase of estates bordering on the Pond, examining titles, etc	$15,400 57
Balance unexpended carried to new account .	1,268 78
	$16,669 35

Water Rates, Fines and Supply Account.

RECEIVED.

From water rates	$213,159 00	
Less rates refunded . . .	2,002 73	
		$211,156 27
Shutting off and letting on water, Sealing, fines and rent .		654 95
From supply account . . .		6,149 67
Accrued interest on bonds sold		228 00
From construction account .		620 00
		$218,808 89

EXPENDED.

For general construction acc't	$24,876 84	
For maintenance account . .	41,951 32	
For supply account	5,216 31	
For interest on Water Loan .	89,765 00	
Paid into the Sinking Fund, being three per cent of $1,652,500	49,575 00	
Surplus of 1888 to the Sinking Fund	7,424 42	
		$218,808 89

Comparative Receipts.

Water-rates for the year ending Nov. 30th, 1888	$211,156 27
Water-rates for the year ending Nov. 30th, 1887	204,748 64
Showing excess of water-rates in 1888 . . .	$6,407 63

Water Supplied.

Amount of water pumped in 1888 . .	1,514,483,582 gallons
Amount of water pumped in 1887 . .	1,409,410,931 gallons
Showing an increase in 1888 of . . .	105,077,651 gallons

How the Water is Used.

Amount of water sold by meter . . .	325,877,500 gallons
Amount of water used in watering the streets	47,746,875 gallons
Amount used for domestic, fire, fountain and other purposes	1,140,864,207 gallons
Making the total gallons pumped . . .	1,514,488,582 gallons

Comparisons of Water Consumptions, etc.

Daily average pumping for the year for the high service in stand pipe . . .	345,473 gallons
Daily average pumping for the year for the low or reservoir service	3,792,474 gallons
Making daily average pumping this year	4,137,947 gallons

Daily increase in consumption of water 1886 over 1885 was	302,209 gallons
Daily increase in consumption of water 1887 over 1886 was	476,307 gallons
Daily increase in consumption of water 1888 over 1887 was	276,547 gallons

The falling-off this year in the daily consumption as compared with former years will be fully accounted for in the next statement we shall present to you, which will show the comparative rainfall for the past three years, this making a great difference in the use of water by hose, on gardens and lawns and for watering the streets.

Rainfall and Height of Water in the Pond.

MONTHS.	RAINFALL.			WATER IN THE POND BELOW HIGH-WATER MARK, 16.85.		
	1886.	1887.	1888.	1886.	1887.	1888.
	Inches.	Inches.	Inches.	Feet.	Feet.	Feet.
December	1.82	5.23	4.22	10.13	10.37	8.55
January	6.41	5.28	3.32	9.67	10.80	5.37
February	7.35	4.66	3.95	6.29	9.95	3.69
March	3.49	4.46	5.55	3.83	9.52	1.72
April	2.43	3.94	2.60	3.21	9.04	1.14
May	3.92	1 79	6.36	3.55	9.30	.81
June	1.48	1.86	3.25	4.31	10.20	1.12
July	3.54	4.19	2.87	5.45	11.61	2.39
August	3.20	4.10	7.08	6.40	12.68	3.75
September	4.64	1.36	8.28	7.59	12.73	3.24
October	3.62	3.22	4.83	8.87	12.66	1.37
November	4.22	3.90	7.70	9.62	12.05	1.25
Total for the year	46.12	43.99	60.01	6.58	10.91	2.87

By reference to the above table it will be seen that during the past year we have had the heaviest rainfall that we have had for many years, amounting to over sixty inches. We think this is unprecedented in the existence of our Water Works, and certainly we have never had the waters so high on the meadows below the Pond. At one time the water was so high that quite a large amount ran over the railroad track of the Boston Ice Company into the Pond. This was an experience we never had before, and immediate steps were taken to have the track raised, so as to prevent in the future a repetition of the same thing.

Stony Brook Water Supply.

When the water was formally introduced into Fresh Pond Nov. 5th, 1887, the water had fallen more than thirteen feet below high water mark, and nearly one-third of the bottom of the Pond was bare. The water was allowed to run in until we reached a point where we could pump at our Station without the use of the auxiliary pumps on the border of the Pond. It was then shut off for a while to accommodate the ice men, as the constant raising of the ice in the Pond broke away the ice from the shore and interfered with their business. Observations made during the filling up of the Pond showed that our conduit would deliver as much water daily as our engineers had estimated. After the ice cutting was over the gate was opened and the Pond allowed to fill up. The highest point was reached in May, when the Pond was nearly up to high water mark.

A correct account is kept daily of the height of water in the reservoir at Stony Brook, and the amount of water which runs to waste over the dam. This account shows that besides filling up Fresh Pond to start with, which required about 700,000,000 gallons of water, and a large amount wasted through our 36-inch blow-off last spring during a freshet to relieve Roberts' Mill from danger, and supply all that we needed for consumption in Cambridge, there was still more than 6,000,000,000 gallons of water that ran over our dam to Roberts' Mill, and thence to Charles River. This is four times as much water that ran to waste over our dam as all our consumption this year.

Quality of the Water, etc.

The quality of the water has proved to be excellent, and by the analysis made semi-monthly by the State Board of Health, it is constantly improving in softness and purity. So far all our expectations from this source of water supply have been fulfilled, and nothing new has been developed to change our conviction that Cambridge has secured an ample supply of good water for many years to come.

Rights in Fresh Pond.

By the Act of the Legislature herein referred to it was provided "in order that the said City of Cambridge may better guard and protect the waters to be stored, distributed and used in said reservoir and storage basin from pollution and intrusion, all the right and control which the Commonwealth has in the great pond known as Fresh Pond in Cambridge is hereby granted and relinquished unto said city, said grant and relinquishment to take effect whenever said city shall by purchase or otherwise become the owner of all the land abutting on said Pond." We consider this a very valuable grant from the Commonwealth to the City of Cambridge, and it ought to be secured at an early day. There is no land now abutting on the Pond that does not belong to the City, except about five hundred feet that belongs to the Fresh Pond Ice Company.

Fresh Pond Ice for Cambridge.

Some of our citizens think it is important that we should have pure ice as well as pure water, and would like to get their ice from Fresh Pond if it were practicable. In our negotiations with the Fresh Pond Ice Company we found them willing to enter into an arrangement to sell the city a strip of land, say 100 feet wide, on the border of the Pond for a driveway and move back their buildings, provided they could have a canal cut across the driveway to float their ice through in the winter, and at the same time be secured by the city the right to cut ice on Fresh Pond for the years to come to supply the people of Cambridge. At this stage of the negotiations it was found that the City did not have the legal right to make such an arrangement, and that further legislation would have to be secured before it could be done. We think, however, if any plan is adopted, the best way would be for the city to take the property of the company, and negotiate about doing the business afterwards and providing such regulations and protection for our people as may be found best. By the taking, also, sundry conditions, restrictions, and rights of way, now attached to the property of the Fresh Pond Ice Company, would vest in the city, and relieve its other property.

Land Taken around Fresh Pond.

In response to the petition of the City Council last winter, by an Act of the Legislature, the City of Cambridge was authorized to take by purchase or otherwise, all the land around Fresh

Pond for the purpose of protecting the purity of the water, and preparing and using Fresh Pond as a storage reservoir in connection with the Stony Brook supply. Under the authority of the City Council, who acted under the authority of the Legislature, the Water Board have taken by purchase from the Middlesex Savings Institution a large tract of land bordering on the Pond on the southwest side, containing about twenty acres, for the sum of $15,000. This tract had a large length bordering on the Pond, and covers the ground formerly occupied by ice houses. A portion of the land is low, and will have to be graded up to prevent it becoming objectionable. We have also taken under the right of eminent domain granted by the Act, all the estate of Dr. Somers lying between Fresh Pond and Concord Avenue; also a small lot adjoining the right of way of the City from Concord Avenue to the gravel pit; we have also taken the whole of Mrs. Gay's estate, and all of the land and buildings of the Boston Ice Company, formerly Tudor's. In all these takings we tried to procure them by purchase, but were unable to agree with the parties on a price. All our takings have been submitted to the City Council for their approval before they were recorded, and were by them approved and ratified, and an attested copy of their action has been recorded with and as a part of the taking by the city.

Land Damages.

During the year nine suits for land taken by the Water Board, on the route to Stony Brook, and about the Stony Brook reservoir have been settled and paid, all of them on the basis of the award of the Commissioners, who were appointed by the Court, under authority of the Act of the Legislature by which the land was taken. There are some other cases still pending before the Commissioners.

Water Damages.

An award was made by the Commissioners in the Roberts case, covering the water power and the land which we have flowed and taken in connection with our dam. While the award, as we believe, more than covers all his damage, yet he was not satisfied, and has taken an appeal to a jury. No other water cases have been acted upon as yet by the Commissioners.

A recent decision of the Supreme Court of Massachusetts we hail as an important step in the right direction in regard to water supplies, by which it was decided that the Commonwealth had a right to give the water which belonged to it to the people for domestic uses, without their being liable to pay damages to those who had long used it for mechanical and mercenary purposes. We think this decision must have a favorable effect on all our cases that may come before a court and jury.

Work Done around the Pond.

During the year a guard fence has been built around that part of the Pond owned and controlled by the City. A driveway and entrance has been made leading from the Pond to Concord Avenue, and considerable filling into the works outside of our roadway has been done. On the south side the bank was dug away sufficient to make the driveway thirty feet wide; a retaining wall was then built about one thousand feet long to hold the bank, and above the wall the bank has been graded, loamed and sodded, the sods being pinned in the most thorough manner. This makes a finish of this part of the borders of the Pond, and in connection with the natural and beautiful grove above the bank is one of the most attractive places in our City as a summer resort. When our roadway is completed all around the Pond, which must come soon, the nearly three-mile drive around our Fresh Pond reservoir will be one of the pleasantest to be found in the vicinity of Boston. A fence has been built on the south and west side of the property of the city bordering on Fresh Pond.

Fresh Pond Drive.

There is one thing that seriously interferes with the pleasure of the drive around our Storage Basin, and that is the intolerable stench that comes from the Niles hog-slaughtering establishment near Concord Avenue, and not far from our Fresh Pond. At times this extends to the high land on Arlington Street where are some of the finest houses in the city, and again the effluvia sweeps across the Pond over to Brattle Street, creating a nusiance in all the region around. We think this nuisance should be abated forthwith.

Work at the Engine House.

It was found that in warm, dry weather in the summer, and in extreme cold weather in the winter, our five million gallon pump could not supply the consumption during the day, and it was necessary to use both of the pumps at the same time. This left us without the necessary duplicate pumping power to provide against accidents. It was found that since we had provided a separate pump for the high service, that the steam power of our pumps was sufficient to carry double their present capacity into the reservoir. After careful consideration it was decided to double the capacity of the water end of one of our pumps. Plans were made and estimates received for making all necessary changes. The work was awarded to the Geo. F. Blake Manufacturing Company, they being the lowest bidders. The changes have been completed, and the pump is now doing a ten million gallon daily work, apparently as easily as it formerly did half as much. As the cost of making this change has been only about one-third that a new ten million gallon pump would cost, the economy of the change will be readily seen. We think that the other pump should be treated in the same way the coming season and put in the most thorough repair. We shall then have ample duplicate pumping power for many years to come, a thing which no city of the size of Cambridge, depending on machinery for its water supply, should be without.

Work to be Done.

We recommend that the following work be done the ensuing year, and at the proper time we shall ask you to grant the needed appropriations to enable us to do the same.

First. To construct a drain that will carry away the surplus water coming from Richardson's Pond, and that part of Belmont near there, from Fresh Pond down into Alewife Brook through some of its tributaries. At present this water gathers on the low lands southwest of the Pond, and from there runs over into the Pond when the lowlands are flooded. At present there is no other place where it can go. We should have done something about this matter last fall, but the water was so high on the meadows that it was impracticable. As soon as this drain is put in the water can be kept as low as the water on the meadows and never again run into our water supply.

Second. The other pumping engine should be changed to correspond with the one that has been altered the past year, a separate condenser should be provided for the high service pump so that it can be run independent of the large pumps and thus make a saving in fuel while all necessary work is being done. The introduction of a small dynamo to light our pumping station by electricity can be done at an expense of about four times what it costs us now per annum for gas, and it would give us better service at greatly reduced cost. We have the steam power and the shafting all ready to belt on to the electric machine.

Third. Our reservoir walls which have been so long neglected should be rebuilt and strengthened in order that they may be perfectly safe against accident. Every year shows signs that this matter ought not to be longer neglected. In connection with rebuilding the walls a chronograph house should be built near the stand-pipe, which can be kept warm in the winter and protect this important agency in helping us detect leaks and waste of water.

Fourth. As soon as the ice freezes so that we can work on it we intend to move the auxiliary pumping house on the border of the Pond for which we have no further use, and recommend that from the material a storage building be made, which we need in the neighborhood of our pumping station. The cost will be small and it will be a great convenience.

Fifth. As much work as can be reasonably done in one year should be done towards filling the low grounds and nook about the Pond up to grade seventeen. By filling back from our roadway and widening the space between the Pond and the low places, gradually we shall accomplish the whole work. We have the material on our own ground and very convenient. Whatever we can do in this direction will be all labor for Cambridge men and teams. None of the money thus expended will go out of the city, but will go to that class of our citizens who need it most. We would recommend liberal appropriations for this work that it may be done as fast as possible.

Remarks.

As will be seen by what we have stated under the head of "Work to be done," the Water Board will need the use of all resources for the next few years to complete the work so well begun in connection with Fresh Pond as our permanent storage basin and reservoir. In this connection we will call attention to Section 25 of the Water Ordinance, which reads, "For water used by the city an account shall be made and the amount thereof shall be charged to the proper appropriations and credited to the Water Works."

This seems to us just, and is in accordance with the usages and customs of other cities, and should be carried out in Cambridge as well as elsewhere in order that we may make a fair showing of our success when compared with others on the same basis. Three years ago we were requested to abate the charge on hydrants, so that the tax rate might be brought within a certain figure, and the last two years we have been requested to abate all charges for hydrants, watering the streets and all city buildings. Of course these requests coming from the City Council, representing the people, whose servants we are, made any course except to comply with their requests seem disrespectful. But now in view of the large expenditures we ought to make to complete our work, we ask candidly and respectfully if the city ought not in justice to return to the practice set forth in its own ordinance, at least for a few years, and let the Water Board have the use of its own proper income until these extraordinary expenses are met and discharged.

We would also call attention to the large amount of gravel and sand that is being taken for the use of the street department, from land which the Water Board have purchased or taken. We think an account of this should be kept and the Water Department credited with its fair value in the bank and the same charged to the Street Department.

For the details of what has been done and the present condition of our Water Works we would refer you to the Report of the Registrar, the Superintendent and the Pumping Engineer, which we herewith transmit to you as a part of our report.

In closing we wish to testify to the cheerful assistance of the City Engineer and those under him in his office whenever we have needed their services, and we would speak a good word for our City Solicitor, who has been untiring in his offorts to protect the city's rights and secure a fair settlement of the many claims that have grown out of Stony Brook extension and other matters connected therewith, and also we would testify to the faithfulness of our Superintendent, who in season and out of season, night and day, has performed the duties devolved upon him with a single eye to the interests of the city. Our Registrar keeps his work well in hand, and his office and books are models of neatness and correctness. Few are aware of how many unpleasant and often unreasonable things this officer has to meet during a year, calling for the exercise of patience and forbearance and yet firmness in the discharge of his duty.

We would also express our appreciation of the work of our Pumping Engineer, who in addition to his regular work has taken the entire oversight of the changes made in our No. 2 pump, and we count ourselves fortunate in having a man in his place who knows just how all such work should be done.

Respectfully submitted,

C. W. KINGSLEY,
WM. E. RUSSELL,
JOHN F. O'BRIEN,
L. M. HANNUM,
K. S. CHAFFEE,
JAS. M. W. HALL,
ALVIN F. SORTWELL,

Cambridge
Water
Board.

REPORT

OF THE

WATER REGISTRAR.

Water Registrar's Office,
Cambridge, Dec. 7, 1888.

To the Cambridge Water Board: —

In compliance with the requirements of the City Ordinance, I present the twenty-fourth annual report of the operations of this department, showing the receipts, expenditures and abatements, together with a statement of the number of water takers, fixtures, etc., for the year ending Nov. 30, 1888.

Amount of bills remaining unpaid, Nov. 30, 1887.

Water-rates	$262 30
Meter-rates	374 60
Supplies and repairs	857 73
Rent	30 00

Amount of bills placed in hands of City Treasurer for collection from Nov. 30, 1887, to Nov. 30, 1888: —

Water-rates	$170,319 18	
Meter-rates	46,376 65	
Supplies and repairs	6,758 76	
Off and on water, rent, seals, and fines	669 95	
Total bills		$225,649 17

There have been collected: —

Water-rates	$213,159 00	
Off and on water, rent, seals, and fines	654 95	
Supplies and repairs	6,149 67	
Total collections	$219,963 62	

There have been abated: —

Water-rates	$3,842 78	
Supplies and repairs	33 65	

There remain unpaid: —

Water-rates	$132 45		
Meter-rates	198 50		
Supplies and repairs	1,433 17		
Rent	45 00		
		$1,809 12	
			$225,649 17

Expenditures.

Construction account (Stony Brook)		$63,006 09	
Construction account (Fresh Pond land purchase)		15,400 57	
Construction account (general)		24,876 84	
Maintenance account, viz: —			
Care and repairs	$27,554 21		
Pumping service	10,855 99		
Office expenses	3,541 12		
		$41,951 32	
Supply and repair account		5,216 31	
Total			$150,451 13

Abatements.

Water-rate bills to the amount of	$3,482 78	
Supply and repair bills to the amount of	33 65	
Total		$3,876 43

Refunds.

Water-rates to the amount of	$2,002 73	
Which amount deducted from receipts	213,159 00	
Leaves net receipts for water	$211,156 27	
Add off and on water, rent, seals, and fines	654 95	
Makes net receipts of rates, fines, etc..		$211,811 22

Off and On.

Water has been shut off for non-payment of rates, or per order on account of vacancy, and seals have been applied to fixtures by request of owners or occupants as follows: —

Supplies shut off in 1888	473
Supplies let on, shut off in 1888	346
Supplies let on, shut off in previous years	65
New supplies let on	308
Seal-locks applied to fixtures in 1888	572
Seal-locks removed, put on in 1888	202
Seal-locks removed, put on in previous years	137

Statement of the yearly revenue received from water-rates since the purchase of the Works by the city: —

From April 28, 1865,	to Dec. 1, 1865	$32,367 19
“ Dec. 1, 1865,	“ 1, 1866	40,073 27
“ “ 1, 1866,	“ 1, 1867	52,733 62
“ “ 1, 1867,	“ 1, 1868	63,747 42
“ “ 1, 1868,	“ 1, 1869	76,149 30
“ “ 1, 1869,	“ 1, 1070	92,606 95
“ “ 1, 1070,	“ 1, 1871	111,782 65
“ “ 1, 1871,	“ 1, 1872	127,201 30
“ “ 1, 1872,	“ 1, 1873	146,117 32
“ “ 1, 1873,	“ 1, 1874	153,634 27
“ “ 1, 1874,	“ 1, 1875	138,880 37
“ “ 1, 1875,	“ 1, 1876	179,166 76
“ “ 1, 1876,	“ 1, 1877	154,843 59
“ “ 1, 1877,	“ 1, 1878	157,443 91
“ “ 1, 1878,	“ 1, 1879	164,681 90
“ “ 1, 1879,	“ 1, 1880	173,325 49
“ “ 1, 1880,	“ 1, 1881	170,062 73
“ “ 1, 1881,	“ 1, 1882	177,430 80
“ “ 1, 1882,	“ 1, 1883	179,361 89
“ “ 1, 1883,	“ 1, 1884 (10 months)	161,526 27
“ “ 1, 1884,	“ 1, 1885	185,544 36
“ “ 1, 1885,	“ 1, 1886	199,404 43
“ “ 1, 1886,	“ 1, 1887	204,748 64
“ “ 1, 1887,	“ 1, 1888	211,156 27

The water works now receive no revenue for water furnished for city uses. In 1887, by request of the City Council, the water-rate charges for fire hydrants, school-houses, public buildings, etc., were abated. In 1888, in addition to these abatements, the charges for water used for watering streets were also abated, making a total abatement of about $16,000.00, or seven per cent of the whole amount of water-rates charged in 1888.

Comparative Statement.

	1887.		1888.	
Construction Account (Stony Brook).				
RECEIVED.				
From bonds issued (par value), additional appropriation by City Council	$68,100 00		$25,000 00	
From premium on bonds	812 50		2,368 00	
Allowance made by R. D. Wood & Co. for cracked and light pipe	287 22			
Sale of tickets, "Boston and Roberts"	42 00		11 00	
Balance of appropriation	93,192 46		51,070 92	
		$162,434 18		$78,447 92
EXPENDED.				
Sundry bills	$111,363 26		$63,006 09	
Balance of appropriation	51,070 92		15,441 83	
		$162,434 18		$78,447 92
Construction Account (Fresh Pond Land Purchase).				
RECEIVED.				
Balance of appropriation	$28,020 20		$16,606 70	
From premium on bonds	112 50			
Sale of apples, etc.			62 65	
		$28,132 70		$16,669 35
EXPENDED.				
Purchase of sundry estates, etc.	$11,526 00		$15,400 57	
Balance of appropriation	16,606 70		1,268 78	
		$28,132 70		$16,669 35
Construction Account (General).				
RECEIVED.				
From excess of receipts from "Rates, fines, etc."	$19,556 35		$24,256 84	
Refund of overcharge	7 50			
Town of Belmont (grading on Cushing St.			20 00	
Sale of auxiliary boiler and pump			600 00	
		$19,563 85		$24,876 84
EXPENDED.				
Sundry bills		$19,563 85		$24,876 84
Maintenance Account.				
RECEIVED.				
Accrued interest on Water Bonds	$172 22		$228 00	
Sale of horse	100 00			
American Rubber Company	751 69			
Duplication of names on pay-roll—amount covered back into treasury	9 50			
From "Rates, fines, etc."	205,205 14		$211,811 22	
		$206,238 55		$212,039 22
EXPENDED.				
Care and repairs	$37,610 62		$41,951 32	
Interest on Water Debt	97,355 00		89,765 00	
Paid to Sinking Fund Commissioners	51,465 00		49,575 00	
		$186,430 62		$181,291 32
Excess of receipts		$19,807 93		$30,747 90
Supply Account.				
Received		$6,138 99		$6,149 67
Expended		4,714 05		5,216 31
Excess of receipts		$1,424 94		$933 36

1887.	Maintenance Account, excess of receipts	$19,807 93
	Supply Account, excess of receipts	1,424 94
	Excess of total receipts over total expenditures	$21,232 87
	Expended on Construction Account (general)	19,556 35
	Balance due Sinking Fund	$1,676 52
1888.	Maintenance Account, excess of receipts	$30,747 90
	Supply Account, excess of receipts	933 36
	Excess of total receipts over total expenditures	$31,681 26
	Expended on Construction Account (general)	24,256 84
	Balance due Sinking Fund	$7,424 42

The excess of receipts for 1888, as shown in the above comparative statement, amounting to $7,424.42, has been carried to the Sinking Fund, as required by law.

Besides the manufactories, etc., supplied by meter, water is supplied to 14,379 families, 907 stables, with 2,655 horses, and 262 cows, 260 shops, 498 offices and stores, by the following fixtures, viz : —

17,360	faucets,	9	hopper-closets,
4,691	wash-basins,	93	urinals,
3,434	wash-tubs,	37	yard hydrants,
2,772	bath-tubs,	4	fountains,
828	slop-closets,	4	tumbler-washers,
8,073	pan-closets,	1,289	hand-hose,

Also,

617 fire-hydrants (beside 16 on private premises).
7 fire-reservoirs,
15 drinking-fountains in public squares.

The above is exclusive of the school-houses, engine-houses, police stations, and other city buildings.

The usual house-to-house inspection has been made, and considerable waste of water discovered and stopped, as well as many charges and collections made of water-rates for fractional parts of the year.

Respectfully submitted,

WALTER H. HARDING,
Registrar.

REPORT

OF THE

COMMITTEE ON ACCOUNTS OF THE CAMBRIDGE WATER BOARD.

We have examined the abstract of accounts as presented to us by the Water Registrar, covering the records of the past year. We have compared it with the statements submitted to us by the City Treasurer and Auditor, and we find them to be correct and in agreement. Annexed is the financial statement presented to us by the Water Registrar, and verified by us :—

Amount of bills in hands of City Treasurer, November 30, 1887 :—		
For water rates and rent	$666 90	
For supplies and repairs	857 73	$1,524 63
Amount of bills delivered to the City Treasurer, for collection during the year ending Nov. 30, 1888:—		
For water rates	170,319 18	
For meter rates	46,376 65	
For supplies and repairs	6,758 76	
For off and on, rent and seals	669 95	$224,124 54
Total bills		225,649 17
There have been abated	3,876 43	
There have been refunded	2,002 73	5,879 16
		$219,770 01
There have been collected	$219,963 62	
Balance uncollected Nov. 30, 1888	1,809 12	
	$221,772 74	
Less refunded as above	2,002 73	$219,770 01

JAS. M. W. HALL, } *Committee*
ALVIN F. SORTWELL, } *on Accounts.*

Cambridge, December 1, 1888.

City of Cambridge,
Office of City Treasurer,
December 1, 1888.

To the Cambridge Water Board:—

Gentlemen: I give you herewith a record of the transactions between the Water Officer and the City Treasurer's office during the year ending November 30, 1888.

Gross collections for account of water works, rates, fines etc.	$217,656 73
Abatement certificates received from Registrar for account of water rates	3,842 78
Gross collections for account of Water Works supply account were	6,183 32
Abatement certificates received from Registrar for supply account	33 65
Refund checks have been paid amounting to	2,002 73
Uncollected bills in my hands November 30, 1888, for water rate account	330 95
Uncollected bills in my hands November 30, 1888, for rent account	45 00
Uncollected bills in my hands November 30, 1888, for supply account	1,433 17

Respectfully,
WILLIAM W. DALLINGER,
City Treasurer.

City of Cambridge,
Office of Auditor of Accounts.
December 1st, 1888.

To the Committee on Accounts of the Cambridge Water Board:—

Gentlemen: In accordance with your request I herewith present a statement from my books for the year ending November 30, 1888.

WATER WORKS (RATES, FINES, ETC.).

Amount of uncollected bills in City Treasurer's hands December 1st, 1887	$666 90
Amount of bills placed in City Treasurer's hands for collection	$217,365 78
Total	$218,032 68
Amount carried forward	$218,032 68

Amount brought forward		$218,032 68
Amount collected by City Treasurer		217,656 73
Balance uncollected		$375 95
Amount of abatements allowed by City Treasurer	$3,842 78	
Amount of refunds paid by City Treasurer	2,002 73	

WATER WORKS (SUPPLIES).

Amount of uncollected bills in City Treasurer's hands Dec. 1st, 1887		$857 73
Amount of bills placed in City Treasurer's hands for collection		6,758 76
Total		$7,616 49
Amount collected by City Treasurer		6,183 32
Balance uncollected		$1,433 17
Amount of abatements allowed by the City Treasurer	$33 65	

Respectfully submitted,

HARRY T. UPHAM,
Auditor of Accounts.

ANNUAL STATEMENT OF THE WATER REGISTRAR TO THE COMMITTEE ON ACCOUNTS, DECEMBER 1, 1888.

Water-rates unpaid Nov. 30, 1887		$666 90	
Bills placed in hands of City Treasurer for collection from Dec. 1, 1887, to Nov. 30, 1888:—			
Water-rates from annual ledgers	$159,665 20		
Water-rates, from fractional ledger,	10,653 98		
Water-rates, from meter ledger	46,376 65		
Off and on water	369 45		
Rent	194 00		
Seals	106 50		
		$217,365 78	
Total bills on rates, fines, etc.		218,032 68	
Supply and repair bills unpaid Nov. 30, 1887	$857 73		
Supply and repair bills placed in hands of City Treasurer for collection from Dec. 1, 1887, to Nov. 30, 1888	6,758 76		
		$7,616 49	
Total bills			$225,649 17

There has been collected, annual ledgers	$157,427 60		
There has been collected, fractional ledger	9,466 68		
There has been collected, meter ledger	46,264 72		
There has been collected, off and on water	369 45		
There has been collected, rent	179 00		
There has been collected, seals	106 50		
Total collections, on rates, fines, etc.		$213,813 95	
Collections on supply and repair accounts		6,149 67	
Total collections		219,963 62	
There have been abated, water-rates	3,842 78		
There have been abated, supplies and repairs	33 65	$3,876 43	
There remain uncollected water-rates	330 95		
There remain uncollected supplies and repairs	1,433 17		
There remain uncollected rent	45 00	1,809 12	
			$225,649 17

Total collections, rates, fines, etc.	213,813 95
Less refunds	2,002 73
Net receipts from rates, fines, etc.	$211,811 22

Attest: WALTER H. HARDING,
Registrar.

REPORT

OF THE

SUPERINTENDENT OF THE WATER WORKS.

CAMBRIDGE, NOV. 30, 1887.

To the President and Members of the Cambridge Water Board :—

GENTLEMEN : I herewith present the annual report of the Superintendent upon the condition of the works and the operations of the past year.

The total amount of water pumped was 1,514,488,582 gallons. Coal consumed per million gallons pumped, $1,552\frac{67}{100}$ pounds.

Water sold by meter and that used for watering streets, 373,624,375 gallons ; leaving as the amount for domestic use 1,140,864,207 gallons.

Number of gallons daily for each inhabitant on the whole amount pumped, $59\frac{11}{100}$ gallons.

Number of gallons daily for each inhabitant on amount for domestic use, $44\frac{53}{100}$ gallons.

Stony Brook Works.

Water has been drawn into Fresh Pond from Stony Brook intermittently, when flowing over the dam, until the pond was full. For nearly two months water has continued flowing over the dam to a large amount.

Thomas Bowman was appointed keeper of the works in December, and during the winter occupied with his family the building put up for the use of the resident engineers during construction. This building has been moved to a position parallel with Summer Street, and rebuilt into a dwelling-house. A cellar has been put under it, a shed and stable built, and the lot fenced from South Street Bridge to the reservoir lot; the whole making a very neat appearance in connection with the surroundings. At this date an iron fence is being put up around the gate-house and across the bridge.

Four of the screens in the screen-room were broken and new ones made with coarser mesh. The accident occurred during a heavy storm last spring, while the 36-in. blow-off was opened; the screens became clogged and finally broke.

Fresh Pond.

The average height of the water in Fresh Pond has been 13.98. The fountain has been run whenever the water was flowing over the dam at Stony Brook. It is very desirable that Fresh Pond should be kept full by running the fountain continually, regulating the discharge by the gate to correspond to the draught from the pond and have the fluctuation in the height of water at the Stony Brook basin.

The roadway from Concord Avenue, running parallel with the Fitchburg Railroad to Fresh Pond Lane, has been graded and put in good condition. Kingsley Park and the extension of Tudor Park on Concord Avenue, have been covered with loam, and seeded down. The Holworthy Street cut has been graded, the gutters paved and banks sodded. The gutters on the roadway, from the gate-house east to near the Fitchburg R. R., and west to the retaining wall, have been paved. The roadway on the South Shore at the high bluff has been widened to 30 feet, about 1,000 feet length of retaining wall built at the foot of the bank, and banks have been graded and sodded from the gate-house to near Cushing Street.

45,000 square feet of sods were laid on this bank and 17,500 square feet at the Holworthy Street cut. A drain has been made on the Cushing Street hill to convey the water away and prevent washing over the banks. 236 feet of 10-inch Akron pipe was laid and the remainder is an open ditch. The roadway through the old gravel pit to Concord Avenue has been completed.

From the overflow gate-house, near the Boston Ice Co. ice-house, around the basin to the Fresh Pond Ice Co. premises, a distance of 11,680 feet, a substantial fence has been built of red cedar posts, cypress rail and hub-guard plank, painted two coats, and the rail also sanded. A picket fence has been built across Holworthy Street hill from the Fitchburg R. R., to Cushing Street, on Cushing Street to the Artemus White estate, thence to Adams Street, at the Gay estate, 5,160 feet in length. Also 370 feet of three-rail fence on Concord Avenue, from the Boston Ice Co. premises to the branch track of the Fitchburg R. R., making the total length of new fence 3.26 miles.

Black's Nook dam has been widened and the roadway graded across the dam and along the North Shore to the Boston Ice Co. premises. An open ditch has been dug through land formerly belonging to the Black estate, connecting with the Little Pond conduit at a point near Concord Avenue, for the purpose of conveying the water from the unfilled portion of Black's Nook and from behind the dams on the south side of Fresh Pond, to the meadows back of Niles' slaughter-house. Only the connection on the Black estate has yet been made.

The water on the meadows at the main track of the Fitchburg R. R. being 10½ inches higher on the south side than on the north, an arrangement was made with the railroad company for the City to furnish four 30-inch pipes and the company to lay them as a culvert at the junction with the ice track. When this is done and proper connections made with the conduit the water behind the dams and in Black's Nook will be kept drawn down to grade 13.00 and 14.00.

The auxiliary pumping house should be removed, as it will only be used as a storehouse, for which purpose the location is objectionable. The stable, on what was formerly the Somers estate, should also be moved to near the Boston Ice Co. premises, on Concord Avenue, to be used for storage. The Atlas engine and boiler have been sold, together with the shafting, leaving only the centrifugal and Follansbee pumps and the Kendall & Roberts portable engine to be sold or stored when the old pump house is removed.

Pumping Works.

A new pump end of a capacity of ten million gallons has been set up by the George F. Blake Manufacturing Co., in place of the No. 2 five million Worthington pump end removed, as more fully stated in the Engineer's report, and I fully endorse the recommendations contained in said report. Slight repairs have been made on the tin roof of the engine-house and new supports put under the coal track in the coal shed. The grounds and Tudor Park have received the necessary care.

Reservoirs.

New steps have been built leading from the street to the standpipe and the brick work around valve chamber repaired. A slight settlement in the bank was observed at the southeast corner of the reservoir about 2 feet below the top. Although the bank was quite soft it was probably due to surface water. Since being repaired no further indication of settlement or any signs of leakage have been discovered. The reservoirs should be thoroughly repaired as soon as spring opens. A new division fence has been built on the east side of the lot from Highland Street to the Reed estate.

High Service.

No extensions have been made on this system during the year. It continues to give perfect satisfaction.

Stony Brook Pipe Line.

A leak was discovered on this line near the gate-house in the Holworthy Street cut. It was traced to the old pond at the head of the cut where the pipe settled last year. Four joints were found slightly drawn towards the pond. At Loafer's Bridge in Waltham a leak was caused by a building mover who drove a spike through the pipe. The ground was frozen very hard, covering the pipe 12 inches and the spike made a clean hole, of about ½ inch diameter, without cracking the pipe. This leak was repaired by plugging. All the air valves were opened this fall without finding air in any of them.

Pipe Yard.

Slight repairs have been made on the roof of the stable and a new gate made to the yard. The buildings are in good condition, but will need painting another year.

Brookline Street Pipe Bridge.

Owing to the rotting of the sills of the house, the sheathing was being washed off by the action of the water on the east side. Repairs were made by putting on two courses of spruce plank thoroughly spiked.

Accompanying this report is that of the Engineer at the pumping station and the following tables show the location of meters, fountains and standpipes, the details of main and supply extension, and the account of stock on hand.

Respectfully submitted,
HIRAM NEVONS,
Superintendent.

Main Pipe.

Main pipes have been laid in the following streets: 3 ft. of 1½-in. and 581½ ft. of 6-in. in Albro St., 60 ft. of 6-in. in Avon Hill St., 15 ft. of 6-in. in Cambridge St. at Dailey Alley, 3 ft. of 1½-inch, and 119½ ft. of 4-inch in Carlisle St., 192 ft. of 4-in. in Carver St., 5½ ft. of 6-in. in Cedar and Dudley Sts., 33 ft., of 6-in. in Central Square, 3 ft. of 1½ in. and 112 ft. of 4-in. in Clarke St., 84 ft., of 6-in. in Clifton St., 52 ft. of 4-in. in Cottage Court, 3 ft. of 1½-in. and 564 ft. of 6-in. in Creighton St., 3 ft. of 1½-in. and 196 ft. of 4-in. in Cushing Court, 134 ft. of 4-in. in Douglass St., 3 ft. of 6-in. in Erie St., 3 ft. of 1½-in. and 152 ft. of 4-in. in Fiske Ave., 511½ ft. of 6-in. in Gray St., 3½ ft. of 1½ in. and 192 ft. of 4-in. in Grigg St., 800 ft. of 4-in. and 5 ft. of 6-in. in Hammond St., 3 ft. of 1½-in. and 135 ft. of 4-in. in Harold Pl., 8 ft. of 6-in. in Harvard St., near Dana St., 99½ ft. of 4-in. in Hews St., 3 ft. of 1½-in. and 147 ft. of 4-in. in Huron St., 43 ft. of 6-in. in Irving St., near Cambridge St., 333 ft. of 6-in. in Lambert Avenue, 193 ft. of 6-in. in Magazine St., 7 ft. of 6-in. in Main and Douglass Sts., 7 ft. of 6-in. in Main and Essex Sts., 7 ft. of 6-in. in Main and Norfolk Sts., 9 ft. of 6-in. in Mt. Auburn and McDonald Sts., 141 ft. of 8-in pipe in Ninth St., 3 ft. of 8-in. in Ninth and Potter Sts., 3 ft. of 1½-in. and 110 ft. of 6-in. in Pemberton St., 104 ft. of 4-in. in Plymouth and Portland Sts., 282 ft. of 6-in. in Portsmouth St., 4 ft. of 6-in. in Prison Point St. 75 ft. of

$1\frac{1}{4}$-in. in Reed Ct., 141 ft. of 2-in. in Russell Ct., 201 ft. of 6-in. in Sixth St., 153 ft. of 4-in. in Somerset St., 2 ft. of 2-in. and 220 ft. of 6-in. in street off Sparks St., 155 ft. of 6-in. in Washington Ave., 361 ft. of 6-in. in Wendell St., 329 ft. of 6-in. in Western Avenue, and 8 ft. of 6-in. additional which was used in setting hydrants.

New Supplies.

Three hundred and seventeen new supplies have been laid, making a total of 9,730. Fifty-eight supplies have been renewed, of which number fifteen with thirteen others, not renewed, were lowered to prevent freezing. Thirty-nine supplies have been furnished with sidewalk shut-offs. Five have been enlarged, and eight extended. Supplies in Central Square, Plymouth, and Portland Streets. Douglass Street and Grigg Street have been connected to new extension.

Leakage.

Three hundred and seventy-five leaks have been stopped, namely ; four on 3-in. main, eight on 4-in. main, one on 4-in. cement, one on 4-in joint, five on 6-in. main, one on 6-in cement, one on 6-in. joint, one on 20-in. main, one on 30-in. main, in Waltham, one on 30-in. main in Holworthy Street, two on hydrants, thirty-eight on supplies in street and three hundred and eleven on premises. Of these two hundred and ninety-three on premises, which were reported by the inspectors while canvassing, were repaired by owners or occupants.

A general inspection of pipes and fixtures has been made by the inspectors.

Drinking Fountains.

The number of drinking fountains at this date is fifteen.

Stand-pipes for Street Watering.

Two new stand-pipes have been set — one on Cambridge at Baldwin Street, and one on Washington Avenue. Forty-three stand-pipes have been re-arranged, and furnished with Chapman drip-valves for the accommodation of the Street Department.

Gates.

All the gates have been inspected, and put into good condition.

Boxes.

Sixteen hydrant, thirty-seven iron and ninety-six wooden boxes have been set in place of decayed, or otherwise worthless ones removed.

Hydrants.

Eighteen new hydrants have been set during the year All of these were of the Chapman Valve Co.'s make. Fourteen hydrants have been removed, of which ten were flush and four posts, making the number now in use 617.

The hydrants removed were located as follows: flush hydrants, from Cambridge St. and Dailey's alley, Cedar and Dudley Sts., Norton St., Main and Douglass Sts., Main and Essex Sts., Main and Norfolk Sts., Mount Auburn and Bow Sts., Mount Auburn and McDonald Sts., Sixth and Potter Sts., and Washington Ave. Boston posts from Main and Mount Auburn Sts., and Third and Winter Sts.; one Coffin post from Murray St., and one Perkins post from Erie St., between Brookline and Pearl Sts.

One of the flush hydrants on the premises of the New England Glass Co., North St., and the one at C. L. Jones', Pearl St., have been removed.

The following hydrants are located on private premises.

Location.	Post Hydrants.	Flush Hydrants.
Boston & Maine Railroad	3	4
Boston Rubber Works	1	
Boston Woven Hose Co.	1	
Houghton & Co	2	2
New England Glass Co		
North & Co	1	
Page, George G. & Co	1	
West End Street Railway Co.	1	
Total	10	6

The location of two hydrants on Binney Street has been changed as follows: one at the corner of Binney and Ninth Sts., and one on Binney St. at the railroad crossing. The line of the street was moved ten feet north for the accommodation of the American Rubber Co., and the hydrants were left ten feet in the street — therefore the change.

The number of street reservoirs now in use is eight.

Meters.

The number of meters in use at this date is two hundred and twenty-one

List of Meters in Use Nov. 30, 1888.

METERS.	LOCALITY.	SIZE.	KIND.
Andrews, Dr. R. R.	Harvard St.	5/8	Union
" D. H.	Main St.	1	Worthington
" "	Ninth St.	1½	Union
Alghieri, Simon	Main St.	¾	Worthington
American Net and Twine Co	Third St.	1½	"
" Rubber Co	Ninth St.	4	Crown
" Steam Safe Co	Main St.	1	Worthington
" " " "	" "	2	Crown
Barbour, W. O.	Osborn St.	1	Worthington
" "	" "	¾	Desper
Bowman & Co	Frank St.	¾	Worthington
Blake, I. W.	Church St.	1	"
" "	Palmer St.	¾	Ball and Fitts
Bay State Brick Co	Spruce St.	¾	Worthington
Bird, H. M.	Broadway	5/8	Union
Bullock, O. S.	"	¾	Worthington
Burton, A. & E.	Harvard St.	¾	"
Boston Woven Hose Co	Hampshire St.	4	"
" Stamping Co	Third St.	1½	Union
B. & M. R. R. New Round House	Prison Point St.	3	"
" " " Repair Shop	Bridge St.	2	Worthington
" " " Round-house	Prison Point St.	2	"
" " " " "	" " "	2	"
" " " Paint Shop	" " "	1	"
" " " Car-house	" " "	2	"
" " " Filling Locomotive	" " "	6	Union
Chemsford Iron Foundry	Bridge St.	¾	Worthington
Chase H. and L.	North St.	1	"
Chadwick Lead Works	" "	1	Union
City of Cambridge, Shepard School	North Ave.	2	Worthington
" " " Ward 1 Building	Brattle Sq.	1½	"
" " " Ward 4 Building	Central Sq.	1½	"
" " " Upton School	Upton St.	2	"
" " " Latin School	Lee St.	1	"
" " " Cemetery	Coolidge Ave.	4	"
" " " Almshouse	Tannery St.	2	"
Cambridge Gas Light Co	Third St.	2	"
" " " "	" "	1	"
" " " "	Ash St.	¾	Crown
Carr Bros	Lopez St.	1	Worthington
Cambridgeport Diary Co	Magazine St.	1	"
Cambridge Electric Light Co	Albro St.	4	"
Cambridge Hospital	Mt. Auburn St.	1½	Crown
Campbell Bros	Osborn St.	¾	Worthington
Cambridge Y. M. C. Ass'n	Main St.	2	"
Cushman Bros	" "	¾	Union
Close, Geo	Broadway	1	Worthington
Coolidge & Caswell	Franklin St.	2	Union
Coleman Bros	Broadway	1	Worthington
Clark, B. P. & Co	Main St.	1½	"
Cochran & Co	Potter St.	1	"
Childs & Co	Main and Osborn Sts.	¾	Union
Cass, Fred	Auburn St.	4	Crown
Cofran, N. M.	Concord Ave.	1½	Union
Coolidge, J. G., Greenhouse	Coolidge Ave.	1	Worthington
" " Barn	" "	2	"
Dow, W. L. W.	Deacon St.	1	"
Doyle, Wm	Cambridge St.	1½	Union
Davis, Curtis & Co	Broadway	2	Worthington
" J. C. & Son	"	2	Crown
Dugan & Rutherford	First St.	1	"
Daniels, Badger & Co	Albany St.	2	"
Davenport, A. H.	Cambridge St.	2	Worthington
" "	Otis St.	¾	Crown
Dailey, C. W.	Cambridge St.	1	Worthington
Derby, H.	Main St.	1	Crown
Dover Stamping Co	Pleasant St.	6	Union
Downing, Theo	Eustis Ct.	1	Worthington
Draper, Francis & Co	Otis St.	¾	"
Dow, Davis & Co	Portland St.	2	Crown
Day Cordage Co	Rogers St.	2	"
Dee, T. W.	Brattle St.	1	"
East Cambridge Club Stable	First St.	1	Worthington
Episcopal Seminary	Brattle St.	1½	"

List of Meters.—*Continued.*

METERS.	LOCATION.	SIZE.	KIND.
England, Wm	Farwell Pl	¾	Worthington
Furfey, James	Brookline St	¾	"
Gillman, Chas. H. & Co	Clark St	¾	"
Geldowsky, F	Thorndike St	2	Union
Gilmore & Eustis	Portland St	2	Worthington
Goepper Bros	Ninth St	1½	"
" "	Spring St	2	"
Greely, Leander	Broadway	1½	"
Griffin & Dolan	Decatur St	⅝	Crown
Hazen, D. M.	Elm St	1	Worthington
Holton, Fred H. & Co	Harvard St	2	"
Harvard College, Holworthy Hall	College Grounds	¾	"
" " Boylston Hall	" "	2	Crown
" " Stoughton Hall	" "	¾	Worthington
" " Sever Hall	" "	¾	"
" " Thayer	" "	1½	"
" " In yard	" "	1½	"
" " University Hall	" "	2	Union
" " Jarvis Field	Everett St	2	Worthington
" " " "	" "	¾	"
" " Memorial Hall	Cambridge St	2	"
" " Boat-house	De Wolfe St	1	Union
" " Botanic Garden	Garden St	1	Crown
" " Gymnasium	Cambridge St	1	"
" " Holyoke House	Harvard St	2	Worthington
" " Museum	Divinity Ave	1	"
" " Scientific School	Kirkland St	¾	"
" " Law School	Holmes Pl	1½	"
" " Laboratory	" "	1	"
" " Holmes Field	North Ave	2	Union
Hawley Machine Co	First St	1	Worthington
Hilton, J. M.	Harvard St	1½	"
Hewes, A. H. & Co	Crescent Ave	1	"
Holt & Bugbee	East St	¾	"
Houghton, H. O. & Co	Blackstone St	2	"
" " "	" "	⅝	"
Howe & Putney	Distilhouse St	1	"
Howland, W. B	Linden St	⅝	Crown
Ivers & Pond, No. 1	Main and Albany Sts	2	Worthington
" " No. 2	Albany St	2	Crown
Irving & Casson	Otis, cor. First St	1	Worthington
Jones, C. L. & Co	Pearl St	¾	"
Keeler & Co	Main St	1	Union
Kemp, L. & Son	Davis St	1	Worthington
Kennedy, Frank A. & Co	Green St	3	"
" " " "	Franklin St	1½	Union
Kendall & Sons Engine Room	Main St	¾	Worthington
" " Machine Shop	" "	¾	"
Low, J. W	Reed St	1½	"
Little, Brown & Co	Blackstone St	¾	Union
Lamb & Ritchie	Albany St	1	Crown
Middlesex County, House of Cor	Second St	2	Worthington
" " " "	Spring St	4	Union
" " Court House	Thorndike St	1	Worthington
" " " "	Otis St	¾	"
" " Reg. of Deeds	" "	1½	"
Mason & Hamlin	Broadway	1½	Crown
Middlesex Bleachery	Sacramento St	1	Worthington
Millan, Alex	Brattle Sq	¾	Crown
Moring, Mrs. A. L	Main St	1	Worthington
Murdock, Walter H	Griggs St	⅝	Ball and Fitts
Mt. Auburn Greenhouse	Brattle St	1	Worthington
" " Cemetery	Mt. Auburn St	⅝	Desper
Maverick Oil Works	Sixth St	2	Worthington
Miller & Shaw	Broadway	1	"
Morrill & Allen	Main St	¾	Crown
New England Tel. Co	" "	¾	"
" " Glass Co	North St	1	Worthington
Norton, E. H	Windsor	1	"
National Linseed Oil Works	Fifth St	1	"
O'Brien, Jonn F	Coolidge Ave	¾	"
" " " Ross House	Main St	¾	"
Place, Chas	Norfork St	1	"
Page, Carlos & Co	Broadway	1½	Union

List of Meters.—*Continued.*

METERS.	LOCATION.	SIZE.	KIND.
Page, Geo. G. & Co	Hampshire St	4	Union
" " " "	" "	2	Worthington
Parry Bros	Raymond St	¾	"
Patterson, R. J	Cedar St.	2	Union
Porcellian Club	Harvard St	1	Crown
Porter's Hotel	North Ave	¾	Worthington
Phillips, Geo. L	Main St	¾	"
Roberts, Geo. B., Boiler Works	" "	¾	"
Reardon's, John, Sons	Waverly St	4	"
Revere Sugar Refinery	Water St	3	"
" " "	" "	3	Union
Reversible Collar Co	Mt. Auburn St	1	Worthington
Rawson & Morrison	Main St	⅝	"
Roughan, M., B. & M. R. R. yard.	Prison Point St	2	Union
Rideout, M. E	State St	1	Worthington
Roberts, O. P	Brattle Sq	1	"
Rogers, Geo. M	Washington St	3	"
Salvation Army	Prospect St	⅝	"
Stow, D. C., Furniture Co	First St	¾	"
Spaulding Cable Works	Main St	¾	Terry
Sands, M. W., Brick Yard	Walden St	1	Worthington
" " " "	Dublin St	⅝	"
" " " "	" "	¾	Union
Shorey, Geo. L	Kinnaird St	4	"
Smart, D. C	Main St	2	Worthington
Saurman, B. F	Gore St	¾	Union
Sortwell, D. R. & Co	Distilhouse St	2	Worthington
Standard Carpet Lining Co	Third St	2	Crown
St. Mary's Church	Norfolk St	2	Worthington
" " Gymnasium	Prospect St	¾	"
Spear, Gregory & Co	Rogers St	1½	"
Slavens, J. W. L	Bridge St	1	Crown
Squire, J. P. & Co	Gore St	2	"
" " "	" "	1	"
" " "	" "	4	Union
" " "	" "	6	Gem
Schaeffer Electric Co	Main St	¾	Union
Tower, Sylvester	Broadway	2	Worthington
Thurston, Hall & Co	Elm St	1	"
Teele, Frank H	Lincoln Ct	¾	"
Thayer, Henry & Co	Broadway	2	"
Tracey, M. F	Boylston St	1	Desper
Temple, F. L	Kirkland St	2	Worthington
Union Pacific Tea Co	Main St	¾	Union
Underhill & Anderson	First St	1½	Worthington
" "	First and Thorndike Sts.	2	Crown
West End Railway Co., Waiting-room.	Bridge St	⅝	Worthington
" " " " Stable	Brookline St	1	"
" " " " Waiting-room.	Main St	¾	Union
" " " " Paint Shop	Dunster St	¾	Worthington
" " " " Repair Shop	" "	¾	"
" " " " Car-house	" "	¾	"
" " " " Stable	" "	¾	"
" " " " Stable	" "	1	"
" " " " Office	Harvard Sq	¾	Crown
" " " " Washing Cars.	Murray St	1½	Worthington
" " " " " "	" "	1	"
" " " " Stable	" "	1½	"
" " " " Car-house.	Camb. and Baldwin Sts.	1	"
" " " " Stable	Baldwin St	1	"
" " " " "	Cambridge St	1	"
" " " " "	" "	1	"
" " " " "	Mt. Auburn St	2	Crown
" " " " "	North Ave	2	Worthington
" " " " "	Main St	2	"
" " " " "	River St	1	"
Warren, J. H., Felton Hall	Cambridge St	1	"
Woods, John M	Bridge St	1½	"
Whitney, W. H	Main St	¾	Crown
Wilson, John & Son	Brattle St	1	Union
Wight & Scorgie	Mt. Auburn St	¾	Crown
Wilkins, Wm	Earl St	1	"
Zerega, J. T	State St	¾	Worthington

List of Drinking Fountains, Nov. 30, 1888.

Bridge Street, junction of Cambridge Street.
Broadway, corner of Norfolk Street.
Brattle Square, east side at Brewer's Block.
Brattle Street, junction of Fresh Pond Lane.
Central Square, west side.
Central Square, east side.
Garden Street at Washington elm.
Hampshire Street, junction of Broadway.
Harvard Square, at the flag-staff.
Inman Square, east side.
Main Street, junction of Broadway.
Main Street, junction of Mount Auburn Street.
North Avenue, corner of Walden Street.
North Avenue, north side, west of Cameron Street.
Putnam Avenue, corner of Brookline Street.

List of Stand-Pipes for Street Watering, Nov. 30, 1888.

Brattle Street, near University Press.
Brattle Street, corner of Sparks Street.
Brattle Street near Fayerweather Street.
Brattle Street, near Fresh Pond Lane.
Bridge Street, junction of Cambridge Street.
Broadway, near Third Street.
Broadway, corner of Sixth Street.
Broadway, corner of Winsor Street.
Broadway, junction of Hampshire Street.
Brookline, corner of Putnam Avenue.
Cambridge and Baldwin Streets.
Cambridge Street, near Warren Street.
Cambridge Street, near Winsor Street.
Cambridge Street, at Inman Square.
Columbia Street, near Austin Street.
Concord Avenue, near Wyeth Street.
Coolidge Avenue, opposite entrance to Mount Auburn Cemetery.
Dana Street, corner Chatham Street.
Fresh Pond Avenue, opposite Vassal Lane.
Gore Street, west of Third Street.

Green Street, near Western Avenue.
Garden Street, near Chauncy Street.
Harvard Street, corner of Prescott Street.
Inman Street, near Broadway.
Kirkland Street, near Quincy Street.
Main Street, near Portland Street.
Main Street, near Hancock Street.
Magazine Street, opposite Warland Street.
Mount Auburn Street, near Athens Street.
Mount Auburn Street, near Willard Street.
Mount Auburn Street, corner of Coolidge Avenue.
North Avenue, near Common.
North Avenue, corner Sacramento Street.
North Avenue, near Roseland Street.
North Avenue, near Beech Street.
North Avenue near Spruce Street.
North Avenue, corner Norris Street.
North Avenue, opposite Tannery Street.
Prison Point Street, opposite Round House.
River Street, near Putnam Avenue.
Sixth Street, near Thorndike Street.
Spruce Street, corner Cedar Street.
Third Street, near Rogers Street.
Thorndike Street, near Third Street.
Western Avenue, corner Howard Street.
Walden Street, corner Mount Pleasant Street.
Washington Avenue, near Lambert Avenue.

Main Pipe Laid, Number of Gates and Fire Hydrants.

LOCATION.	IRON PIPE.		GATES.		HYDRANTS.	
	Length.	Size.	No.	Size.	No.	Size.
	Feet.	Inch.		Inch.		
Albro Street	581½	6	3	6	....	....
Albro Street	3	1½	1	6	....	....
Avon Hill Street	60	6	1	6	....	....
Cambridge St. & Dailey Alley	15	6	....	....	1	6
Carlisle Street	3	1½	1	4	....	....
Carlisle Street	119½	4	....	....	....	....
Carver Street	192	4	....	....	....	....
Cedar and Dudley Sts	5½	6	....	....	1	6
Central Square	33	6	....	....	1	6
Cherry and Washington Sts	....	....	1	4	....	....
Clark Street	112	4	1	4	....	....
Clark Street	3	1½	....	....	....	....
Clifton Street	84	6	....	....	....	....
Cottage Court	52	4	....	....	....	....
Creighton Street	3	1½	....	....	....	....
Creighton Street	564	6	1	6	....	....
Cushing Court	196	4	1	4	....	....
Cushing Court	3	1½	....	..	....	....
Douglass Street	134	4	1	4	....	....
Erie Street	3	6	....	....	1	6
Fiske Avenue	152	4	1	4	....	....
Fiske Avenue	3	1½	....	....	....	....
Gray Street	511½	6	2	6	1	6
Grigg Street	192	4	....	....	....	....
Grigg Street	3½	1½	....	....	....	....
Hammond Street	800	4	1	4	....	....
Hammond Street	5	6	....	....	1	6
Harold Place	135	4	1	4	....	....
Harold Place	3	1½	....	....	....	....
Harvard, near Dana	8	6	....	..	1	6
Hews Street	99½	4	1	4	....	....
Huron Street	147	4	1	4	....	....
Huron Street	3	1½	....	....	....	....
Irving and Cambridge Sts	43	6	1	6	1	6
Lambert Avenue	333	6	1	6	....	....
Magazine Street	193	6	....	....	....	....
Main and Douglass Sts	7	6	....	....	1	6
Main and Essex Sts	7	6	....	....	1	6
Main & Mount Auburn Sts	2	6	....	....	1	6
Main and Norfolk Sts	7	6	....	....	1	6
Mt. Auburn & McDonald Sts.	9	6	....	....	1	6
Murray Street	2	6	....	....	1	6
Ninth Street	144	8	2	8	....	....
Pemberton Street	110	6	....	....	....	....
Pemberton Street	3	1½	....	....	....	....
Plymouth and Portland Sts	104	4	1	4	....	....
Portsmouth Street	282	6	2	6	....	....
Prison Point Street	4	6	2	6	....	....
Reed Court	75	1¼	....	....	....	....
Russell Court	141	2	....	....	....	....
Sixth Street	201	6	1	6	1	6
Somerset Street	153	4	1	4	....	....
Sparks Street	220	6	1	6	....	....
Sparks Street	2	2	....	....	....	....
Third and Winter Sts	4	6	....	....	1	6
Washington Street	155	6	1	6	1	6
Wendell Street	361	6	....	....	....	....
Western Avenue	329	6	1	4	1	6
Winsor and Washington Sts.	....	....	2	4	....	....

Recapitulation.

	8 Inch.	6 Inch.	4 Inch.	2 Inch.	1½ Inch.	1¼ Inch.	Total.
Length in feet of iron pipe......	144	4139½	2588	143	30½	75	7120
Number of gates................	2	17	15	....	....	....	34
Number of hydrants.............	....	....	....	....	....	....	18

New Supplies.

	6 Inch.	4 Inch.	2 Inch.	1½ Inch.	1¼ Inch.	1 Inch.	¾ Inch.	Total.
Length in feet of pipe laid.............	25	190½	777	642	706½	1922½	8029½	12,293
Number of Supplies.....................	1	6	12	9	20	47	222	317
Number of stop and waste-cocks.......	....	....	3	8	18	44	223	296
Number of stop and waste-valves......	....	....	9	1	2	4	3	19
Number of screw-cocks................	....	....	9	9	21	47	223	309
Number of sidewalk-cocks............	....	....	....	....	....	47	220	267
Number of service boxes..............	....	....	....	....	....	....	....	269
Number of boxes, frames and covers..	....	....	....	....	....	....	....	51

List of Check-Valves.

OLD HIGH-SERVICE.

	Size in Inches.
Lake View Avenue, 150 feet north from Huron Street..........	10
Lake View Avenue, 150 feet north from Brattle Street.........	6
Fayerweather and Reservoir Streets............................	6
Concord Avenue, 135 feet south from Buckingham Street........	6
Garden and Linnæan Streets....................................	6
Raymond and Linnæan Streets..................................	6
Avon Hill and Linnæan Streets.................................	6
Arlington Street, 230 feet west of North Avenue..............	6
Mt. Vernon Street, 100 feet west from North Avenue..........	6
Mt. Pleasant Street, 150 feet south from Walden Street.......	6

List of Check-Valves.—*Continued.*

NEW HIGH-SERVICE.

	Size in Inches.
Highland Street, on old 12-inch main	12
Dana Street and Broadway	4
Harvard Street, near Hancock	6
Centre Street, near Hancock	4
Dana Street, near Main	4
Harvard and Ellery Streets, two valves	6
Harvard and Trowbridge Streets, two valves	4
Harvard and Ware Streets	4
Harvard and Prescott Streets	4
Quincy Street, near Broadway	4
Broadway, on line of 6-inch pipe crossing College Grounds	6
Waterhouse Street, near small common	6
Kirkland and Cambridge Streets	10
Berkeley Street, near Craigie	4
Appian Way, near Brattle Street	4
Linnæan and Lancaster Streets (old high-service extension)	6
Kirkland Street and Frisbie Place	4

Statement of Stock on Hand, Dec. 1, 1888.

FOR STREET MAINS (IRON PIPES AND FITTINGS.)

	48 In.	36 In.	30 In.	24 In.	20 In.	16 In.	12 In.	10 In.	8 In.	6 In.	4 In.	2 In.
Straight pipes, 12 feet lengths	2	..	1	..	19	6	83	104	159	159	579	12
Bends	..	..	1	3	2	2	2	8	12	10	11	..
Y Branches	..	..	..	1	1–12	..	1	..	..	..	..	..
Sleeves	..	..	1	4	5	2	1	..	8	10	21	3
Drain offsets	..	..	..	..	..	..	..	..	..	8	..	..
Offsets	..	..	..	..	..	..	..	6	4	9	5	..
Gates	..	..	..	..	..	..	2	2	..	3	3	2
Caps	..	..	..	..	2	..	8	2	4	16	14	..
Blow-off Branches	..	..	..	..	1–6	..	..	..	..	..	..	..
Clamps f'r c'mt pipe	..	..	..	..	4	..	..	..	..	..	..	..
Check-valves	..	..	..	2	..	..	..	1	..	..	..	..
T's	..	..	..	3–6	2–6	1–6	3–8	8–6	6–6	6–4	19–4	2–3
"	..	..	..	1–8	1–12	..	..	3–8	13–8	..	..	..
"	..	..	..	1–16	2–20	..	..	..	..	..	..	..
"	..	..	..	1–20	..	..	..	..	..	..	..	..
"	..	..	..	1–24	..	..	..	..	..	..	..	..
Crosses	..	..	1–6	..	1–10	3–6	5–4	7–6	2–4	8–4	14	2
"	..	..	..	..	1–20	1–12	7–6	2–8	..	1–6	..	..
"	..	..	..	..	..	..	5–10	1–10	..	..	..	..
Reducers	..	..	..	1–10	1–8	1–6	..	1–6	8–6	11–4	..	..
	..	..	..	..	1–10	..	..	..	..	..	..	..
"	..	..	..	..	2–12	..	..	1–8	..	..	..	..
Wooden plugs	..	..	..	2	2	2	3	1	13	25	18	8
Clamp sleeves	..	..	..	5	4	2	4	6	4	8	12	5

Statement of Stock.—*Continued.*

For Supplies (Galvanized Pipe and Brass Fittings).

	2 Inch.	1½ Inch.	1¼ Inch.	1 Inch.	¾ Inch.	½ inch.
Feet in length of galvanized pipe..	338	528	646	1054	6528	14
Elbows	24	29	34	54	70	18
Street elbows	..	..	..	16	70	..
Couplings	51	84	55	79	43	19
Unions	57	35	16	19	42	..
Faucets	..	..	..	13	14	14
Stop and waste cocks	24	11	..	12	30	..
Screw-cocks	9	6	5	10	130	..
Sidewalk cocks	..	..	..	66	224	..
Screw-cocks for cement pipes	..	4	..	18	..	..
Blow-off cocks	..	3	..	..	..	..
Air chambers	..	..	..	46	6	36
Nipples	34	97	89	355	230	..
Socket end of rods	..	..	..	..	..	15
Plugs	7	20	29	42	25	..
Fountain-cocks	..	..	..	..	6	..
Sill-cocks	..	..	..	..	7	..
Hose-nipples	..	..	..	..	12	..
T's	22	27	87	75	145	35
Caps	49	13	14	6	16	..
Lead connections	..	..	..	..	20	..
Hydrant-cocks	..	..	..	4	6	..
Check-valves	1	1	1	4	4	..
Chapman stop and waste-valves...	16	24	13	9	87	..
Bushings, different sizes	..	..	..	..	..	229
Nickeled sill-valves	..	..	..	..	..	6
Crosses	4	16	3	5	..	..
Gates	..	..	..	..	..	2
Clips, different sizes	..	..	..	..	..	32
Reducing couplings, different sizes	..	..	..	..	..	113
Brass unions for lead connections.	..	..	..	..	33	..
Clamp-sleeves for cement-pipes ...	..	..	..	..	..	23
Garden hydrants	..	..	..	..	..	3

Stock in Shop and Yard.

3 hydrant-valves.
30 bolts for flush hydrants.
23 stop and wastes for flush-hydrants.
4 lead kettles.
3 furnaces.
3 ladles.
3 bench vises.
4 drinking fountains.
1 meter-box
5 iron boxes.
11 hydrant boxes.
12 wooden gate-boxes.
38 large frames and covers for gates.
28 small frames and covers for gates.
25 large frames and covers for hydrants.
260 risers for wooden boxes.
170 seals.
2 breast drills.
1 ratchet for tapping main pipe.
3 machines for tapping cement pipe.

1 washer cutter.
2 platform scales.
2 grindstones.
1 diaphram pump.
1 hand-pump.
9 thawing-out pumps
450 thawing-out pipes.
½ barrel clay.
2 hatchets.
3 hoes.
1 hay cutter.
3 small derricks.
1 breast derrick.
15 pipe wrenches.
2 nut wrenches.
7 monkey wrenches.
30 nuts.
1 axe.
4 sledge hammers.
2 paving hammers.
4 hand hammers.
Lot of old junk.
2 pair rubber boots.
1 cord wood.
25 feet ¾-inch hose.
7 tongs.
11 pipe cutters.
10
½ cask cement.
9 screw-drivers.
3 saws.
1 floating hook.
1 large mall.
5 barrels R. R. spikes.
Plane, square, compasses, etc., for carpentering.
Lot of lumber.
Lot of spindles for 4-inch and 6-inch gates.
4 horses.
1 truck.
5 wagons.
6 harnesses.
2 sleighs.
2 double-runner sleds.
8 blankets.
3 buffalo robes.
2 lap robes.
3 oil coverings for horses.
1 lathe, with usual chucks and tools.
1 water motor.
1 threading machine, with dies complete.
1 drilling machine, with drills complete.
3 tapping machines for supplies, with taps and drills.
4 hooks for tapping main pipe.
2 2-inch taps and drills.
4 sets main pipe tools.
9 gate wrenches.
4 blow-off wrenches.
4 inch cock wrenches.
18 small tee wrenches.
1 30 overflow bell.
1 stove, with fixtures.
1 tank for measuring water.
1 work bench with drawers.
1 work bench.
1 clock.
50 block stones.
6 wooden horses.
7 oil cans.
1 10-inch iron B. O. box
1 tool chest.
9 chains.
28 shovels.
3 snow shovels.
36 picks.
21 trench rammers.
2 paving rammers.
12 pails.
6 iron bars.
2 tamping bars.
793 lbs. lead.
60 lbs. packing.
7 hydrant bodies.
1 set hydrant tools.
281 lead pipes.
15 post hydrant jackets.
8 post hydrants.
19 post hydrant rods.
5 hammers.
Lot of block and wedges.
Lot of counters and ratchet.
Movements for meters.
1 ¾ inch Worthington meter.
3 ⅝-inch Worthington meters.
4 1-inch Worthington meters.
4⅝-inch Union Rotary meters.
2 ¾-inch Union Rotary meters.

2 1½-inch Union Rotary meters.
1 2-inch Union Rotary meter.
1 6-inch Union Rotary meter.
1 ¾-inch Crown meters.
11-inch Crown meter.
2 1½-inch Crown meter.
2 thawing furnaces.
1 thawing boiler.
1 watering cart.
2 ladders.
2 barrels charcoal.
1 chain tongs.
6 chairs.
1 B. O. hose.
150 feet 2½ hose.
10 plates with dies.
13 shut-off wrenches.
2 trowels.
46 lbs. sheet rubber packing.
Lot of old brass.
13 shut-off rods.
4 flush hydrant wrenches.
4 tool bags.
20 lanterns.
19 2-inch offsets.
6 fountain faucets.
2 fountain cocks.
3 forks.
1 rake.
3 ½-inch cock wrenches.
2 large tapering gate boxes.

Tools at Fresh Pond.

6 chisel picks.
2 chisel bars.
4 sledge hammers.
3 paving hammers.
1 row boat and oars.
1 weed cutter.
4 chisels and 1 hammer for main pipe.
1 sprinkling can.
1 rope tackle.
1 lantern.
3 gate wrenches.
1 cock wrench.
1 fork wrench.
2 ropes.
15 old wheelbarrows.
43 shovels.
11 picks.
4 iron bars.
3 pails.
6 chains.
8 rakes.
2 saws.
1 hatchet.
3 axes.
6 steel drills.
1 claw hammer.
2 plows.
1 scraper.
3 grub hoes.
4 rammers.
3 post hole scoops.
1 harrow.
1 gravel screen.
2 tool chests.
1 R. R. spike hammer.
1 drag.
250 feet of 1-inch hose and nozzle.
1¾ casks wire nails.
Lot of old R. R. ties.
Lot of old plank.
Lot of old sheet piling.
2 lengths of 30-inch pipe.
2 levels.

Tools at Stony Brook.

1 row boat and oars.
3 gate wrenches.
2 pair grab hooks.
1 rope fall.
1 chain fall.
40 feet of rope.
1 ladder.
2 chairs.
1 stove and fixtures.
17 cast-iron signs.
1 monkey wrench.
1 cold chisel.
1 grindstone.
2 shovels.
3 picks.
1 iron bar.

1 sprinkling can.
1 reamer.
1 whipple-tree and traces.
1 drag.
3 rakes.
1 fork.
2 scythes and snath.
2 whet-stones.
1 sod knife.
2 lanterns.
1 oil can.
1 oiler.
1 lead kettle.
1 ladle.
1 tip cart.
2 lengths 36-inch pipe.
12 lengths 30-inch pipe.
2 30-inch sleeves.
2 pike poles.
1 sickle.

REPORT

OF THE

ENGINEER OF THE PUMPING STATION.

Pumping Station,
Cambridge Water Works,
December 12, 1888.

Hiram Nevons Esq., Superintendent :—

Sir: The machinery at the pumping station is in good condition. The increased consumption of water during the past year has rendered it necessary to run both large engines a part of each day for the larger part of the year, during January and February the amount pumped being on some days as much as 7,000,000 gallons. Early this year it was recommended to the Water Board that new water cylinders be put upon Engine No. 2, increasing its capacity from 5,000,000 to 10,000,000 gallons daily.

The Board took favorable action in the matter and specifications were prepared, and plans and estimates asked for from H. R. Worthington and the Geo. F. Blake Manufacturing Co. The latter being the lowest bidder was awarded the contract, and has so far completed its work that the engine has been tested and has shown that it is capable of doing the increased work easily. I would recommend that No. 1 engine be altered in the same way at an early day and that an independent air pump and condenser be attached to the high service engine, so that it can be run when the main engines are stopped. Also that the pumping station be lighted by electricity; it can be done at a very slight expense and will be much cheaper than the present way of lighting.

Following will be found a statement of the expenses at the pumping station, with the usual tables.

Respectfully submitted,

EDWIN C. BROOKS,
Engineer.

STATEMENT.

$974\frac{240}{2240}$ tons Cumberland coal at $4.65	$4,529 60
$76\frac{260}{2240}$ tons Cumberland coal at $4.56	347 09
Oil, waste, packing, etc.	261 05
Repairs on engines and boilers	41 21
Repairs on buildings and care of grounds	47 98
Tools	88 50
Gas	103 74
Ice	19 20
Salaries	5,417 62
Total	$10,855 99

Engine Record, Pond Levels and Rainfall.

DATE.	LOW SERVICE ENGINES.						HIGH SERVICE ENGINES.						Total water pumped.	Daily average water pumped.	Total coal consumed.	Daily average coal consumed.	Average height of Pond.	Rainfall.
	Total pumping time.		Daily average pumping time.		Total water pumped.	Daily average water pumped.	Total pumping time.		Daily average pumping time.		Total water pumped.	Daily average water pumped.						
	Hrs.	Min.	Hrs.	Min.	Gallons.	Gallons.	Hrs.	Min.	Hrs.	Min.	Gallons.	Gallons.	Gallons.	Gallons.	Lbs.	Lbs.	Feet.	Inches.
December, 1887..	421	45	13	36	101,602,200	3,277,490	421	45	13	36	11,074,733	357,249	112,676,933	3,634,739	180,400	5,819	8.30	4.22
January, 1888....	608	30	19	38	137,259.000	4,427,710	474	45	15	19	12,737,741	410,895	149,996,741	4,838,605	234,400	7,561	11.48	3.32
February, 1888..	627	35	21	38	132,788,100	4,578,900	425	35	14	41	10,970,400	378,290	143,758,500	4,957,190	225,600	7,779	13.16	3.95
March, 1888......	557	55	18	00	117,693,000	3.796,548	420	15	13	33	10,990,291	354,526	128,683,291	4,151,074	218,200	7,039	15.13	5.55
April, 1888	453	25	15	07	100,384,200	3,346,140	397	10	13	14	10,613,357	353,778	110,997,557	3,699,918	188,800	6,293	15.71	2.60
May, 1888........	485	45	15	40	111,286,500	3,589,887	414	15	13	22	11,235.264	362,428	122,521,764	3,952,315	190,000	6,129	16.04	6.36
June, 1888	537	05	17	54	121,815,000	4,060,500	410	45	13	42	11,614,618	387,154	133,429,238	4,447,654	194,000	6,467	15.72	3.25
July, 1888........	529	40	17	05	125,485,500	4,047,919	422	50	13	38	9,943,738	320,766	135,429,238	4,368,685	199,000	6,420	14.46	2.87
August, 1888	491	30	15	51	119,355,000	3,850,161	422	15	13	37	9,566,381	308,593	128,921,381	4,158,754	193,000	6,226	13.10	7.08
September, 1888.	455	10	15	11	111,976,200	3,732,540	411	20	13	41	9,118,163	303,966	121,095,163	4,036,506	178,500	5,950	13.61	8.28
October, 1888....	446	15	14	24	106,995,000	3,451,452	446	15	14	24	9,890,938	319,062	116,885,938	3,770,514	180,100	5,810	15.48	4.83
November, 1888..	429	30	14	19	101,405,700	3,380,190	429	30	14	19	8,687,558	289,585	110,093,258	3,669,775	170,500	5,683	15.60	7.70
Total..........	6,044	05			1,388,045,400		5,096	40			126,443,182		1,514,488,582		2,352,500			60.01
Daily Average..	16	31			3,792,474		13	56			345,473		4,137,947		6,428		13.98	

Stock on Hand, December 1, 1888.

1,150 tons Cumberland coal, 45 gallons cylinder oil, 50 gallons engine oil, 10 lbs. tallow, 70 lbs. cotton waste, 50 lbs. rubber packing, 40 lbs. Usidurian packing, 18 lbs. square flax packing, 52 manhole gaskets, 43 handhole gaskets, 8 9-in. rubber valves, 2 valve seats, 2 steam gauges, 50 lbs. of soap, 100 fire brick, 1 broom, 2 bbls. brimstone, 300 lbs. bolts and nuts, 1 lot iron pipe, 1 lot pipe fittings.

Tools, Furniture and Instruments.

1 18-in.x10-ft. engine lathe, with chucks, tools, etc., 15-in.x6-in. engine, 1 lot shafting, belting and pulleys, 1 grindstone, 2 vises, 1 vise bench, 3 die-plates and dies, 1 set pipe taps, 1 set hand taps, 2 pipe cutters, 14 pairs pipe tongs, 3 hand hammers, 1 copper hammer, 18 cold chisels, 1 hand bellows, 12 files, 6 screw wrenches, 4 Stillson wrenches, 2 clamp screws, 1 sledge, 2 ratchets, 24 drills, 1 breast drill, 2 jack screws, 6 steel bars, 2 soldering irons, 4 cylinder-head cranes, 12 eye-bolts, 75 starting-bolts, 1 chain fall, 3 tackles, 2 ladles, 4 wooden horses, 1 oil cabinet, 1 set measures, 1 lot oil cans, 1 oil pump, 1 carpenter's bench, 4 planes, 4 hand-saws, 8 chisels, 7 gouges, 2 screw-drivers, 2 bit stocks, 13 bits, 3 augers, 1 draw-knife, 1 spokeshave, 1 axe, 3 hatchets, 2 squares, 1 set fire tools, 1 coal car, 1 pair platform scales, 2 wheelbarrows, 12 scoop shovels, 1 tube brush, 1 forge, 1 anvil, 5 pairs tongs, 2 hand chisels, 1 lawn mower, 1 steel rake, 4 forks, 1 weeder, 1 spade, 1 pick, 6 ladders, 3 step-ladders, 200 feet 2-in. hose and pipe, 2 water coolers, 6 fire pails, 6 water pails, 1 window brush, 1 floor brush, 1 dust brush, 1 feather duster, 1 dust pan, 1 lot cocoa matting, 5 mats, 6 spittoons, 1 lot gas fixtures, 4 bracket lamps, 4 lanterns, 3 hand lamps, 1 desk, 2 tables, 2 clocks, 12 chairs, 1 barometer, 1 hygrophant, 1 thermometer, 2 rain gauges, 1 snow gauge.

Tools, Furniture, etc., at Engine House at Pond.

1 12x20-in. portable engine and boiler, 1 No. 2½ Blake pump, 1 12-in. centrifugal pump, 2 12-in. Follansbee propeller pumps, 1 Hancock inspirator, 1 hand force pump, 10 ft. ¾-in. steam hose, 1 set fire tools, 1 belt awl, 1 belt punch, 2 bracket lamps, 1 large lantern, 1 stove and pipe, 1 cot bed and bedding.

REPORT

OF THE

CHIEF ENGINEER OF THE FIRE DEPARTMENT.

CHIEF ENGINEER'S OFFICE, CITY HALL,
CAMBRIDGE, MASS, December 1, 1888.

To His Honor the Mayor and the City Council: —

GENTLEMEN: In compliance with the provisions of the City Ordinance, I have the honor herewith to submit to you my tenth annual report of the Fire Department for the fiscal year ending November 30, 1888.

Manual Force.

The manual force of the department has been strengthened during the year by the appointment of a permanent foreman for Hook and Ladder Co. No. 2, and by the appointment of a call hoseman in Chemical Engine Co. No. 1, making the total force of the department, including the fire-alarm corps, ninety-nine officers and men. Twenty-five are permanently employed, and seventy-four are call men.

Two deaths have occurred among the members of the force during the past pear, that of Robert L. Williams, hoseman of Engine Co. No. 1, who died April 16, 1888, and that of Thomas H. McCoy, ladderman of Hook and Ladder No. 1, who died June 24, 1888. The former had been a member of the department nearly six years, and the latter nearly five years. They were faithful and efficient firemen, and possessed the confidence of their superior officers and the respect and esteem of their associates.

Apparatus.

The apparatus of the department, with few exceptions, is in good serviceable condition, and is classified as follows: Six steam fire engines, five in service, one in reserve, one double-tank chemical engine, one hose-wagon, four hose-carriages, two hook and ladder trucks, four fuel-wagons, three hose-pungs and the chief's wagon; also a wagon and pung used by the fire-alarm department.

Early in the year Engine No. 2 was sent to the shop for repairs. It was provided with a complete new boiler, new wheels, painted and otherwise improved and repaired. The engine is now in first-class condition.

Each hook and ladder truck was furnished with the necessary life-saving appliances as provided by chapter 310 of the Legislative Acts of 1888.

Both ladder carriages are greatly in need of repairs which should be made as early as possible, and as the department is not in possession of a spare carriage I would recommend to your Honorable Boards that a new one be purchased to take the place of No. 1, which is considerably worn; and the old carriage kept in reserve. It is essential that there should be a spare truck to take the place of either of those in service while making repairs on them or in case of accident which is liable to occur while answering an alarm of fire.

I would also recommend that a new fuel-wagon be bought to take the place of the one now in use at Engine House No. 2. It has been in service for more than twenty-five years and is not worth repairing.

Hose.

During the year 500 feet of hose has been condemned and 400 feet purchased. The total amount of serviceable hose, as near as it is possible to ascertain by frequent inspection, and now in use by the several engine companies, is 10,400 feet.

It will be necessary to purchase hose this coming year to replace that which becomes weak and unsafe for further service.

Horses.

There are twenty-five horses under the charge of this department. Four of them have been in the service for more than fourteen years and should be exchanged for younger horses. During the past year two horses have been bought and one sold. On the sixth day of last June, one of the horses attached to Engine No. 1, while being driven to a fire fell at the corner of Brattle and James streets and broke one of his hind legs. The horse had to be killed. The matter was fully investigated by the Board of Engineers, who found that it was purely accidental and that no blame was attached to the driver.

Fire-Alarm Telegraph.

Owing to the many severe storms and high winds during the past twelve months, the fire-alarm has required the closest attention on the part of those having the care of it, in order to keep it in working condition, as the storms in several cases have done considerable damage to the wires by tearing them from their fastenings and severing the lines, thereby rendering the alarm unserviceable for a time.

Early on the morning of March 13, during a severe snow storm, a fire was discovered in Green & Co.'s stove store, Nos. 651 and 653 Main Street. The fire-alarm wires being down at that time, the alarm could not be given correctly. After some delay messengers were sent to the nearest engine houses to notify them of the fire, no other means being available. The fire in the meantime gained considerable headway and extended to the adjoining stores, doing considerable damage.

During the past year four street signal boxes have been purchased and placed in localities where they were much needed. A box numbered 242, purchased by the Cambridge Electric Light Co., and located in their works on Albro Street, was by permission connected with the fire-alarm.

I would again renew my recommendation that the several fire stations be connected by telephone. This is a matter of considerable importance to the fire department, as in case of a mishap to the fire-alarm, it would give another means in case of fire, of communicating with the stations.

Houses.

All repairs have been made during the year on the houses occupied by this department that were necessary to keep them in proper condition.

A brick building to be used as a coal station has been erected in the yard of the Boardman school-house fronting on School Street. The station is large enough for the storage of a wagon and several tons of cannel coal. The coal is for use at fires. The above work was done under the direction of the superintendent of public buildings.

Fires and Alarms.

The whole number of fires and alarms from all causes during the year was: Bell alarms, 99; still alarms, 33; making a total of 132, or 24 more than the previous year. The losses and insurance, as near as could be ascertained, are as follows:

	Loss.	Ins.	Ins. Paid.
On Buildings,	$18,027 00	$126,150 00	$14,511 00
On Contents,	50,100 00	70,425 00	35,426 00
Total,	$68,127 00	$196,575 00	$49,937 00

Appropriation, Receipts and Expenditures.

The total appropriation for this department, including the estimated revenue, for the fiscal year ending November 30, 1888, was $54,000.59. The receipts over the estimated revenue were $150.83. The expenditures were as follows: —

Pay-roll	$39,787 89
Apparatus and repairs,	2,490 44
Bedding and Furniture	567 96
Coal station (new)	710 85
Fuel	1,335 01
Fire-alarm and supplies	1,669 38
Gas	851 08
Hay, grain and straw	2,453 36
Harnesses, repairs of, horse blankets and whips	287 64
Hose and repairs	482 27
Horses	600 00
Horse hire and men (extra)	447 00
Horse-shoeing	504 59
Hydrants, care of	135 08
Incidentals	174 59
Paving in front of H. and L. House No. 2	335 32
Repairs on heating apparatus, H. and L. House No. 2	204 52
Rent of land and shed	78 50
Supplies	480 03
Veterinary services and medicine	79 97
Washing	325 11
	$54,000 59

Appropriation	$52,959 69	
Estimated revenue	1,040 90	
		$54,000 59
Amount expended		54,000 59

Appointments, Transfers and Discharges.

Engine Company No. 1.—William H. Emery resigned as foreman February 1. Assistant foreman John H. Brown was appointed foreman, and hoseman Daniel E. Shea was appointed assistant foreman the same date. William A. Carlin, hoseman, was discharged at his own request February 9.

Robert L. Williams, hoseman, deceased April 16. Daniel E. Powers was appointed hoseman May 1.

Engine Company No. 3.— John S. Dooris, hoseman, was discharged at his own request October 10, and Patrick J. Hayes was appointed to fill the vacancy November 13. Louis J. Stanger, hoseman, was discharged for the reason of his being daily employed outside the city limits, November 30.

Engine Company No. 4.— Edward A. Hurd, hoseman, was transferred to Engine Co. No. 1, February 14, and Daniel McCaughin was appointed to fill the vacancy April 10.

Engine Company No. 5.— Frank C. Mullett, hoseman, was discharged for the reason of his being daily employed outside of city limits, November 30.

Chemical Engine Company No. 1.— George W. Butler was appointed hoseman February 28.

Hook and Ladder Company No. 1.— Thomas H. McCoy, ladderman, deceased June 24, and Thomas H. Donlan was appointed to fill the vacancy July 17.

Hook and Ladder Company No. 2.— George H. Taylor, ladderman, was discharged at his own request February 29, and Charles H. Cutting was appointed to fill the vacancy March 13.

Thomas L. Hunter was appointed permanent foreman July 17.

Orvill W. Van Duzee and Joseph B. Farmer, laddermen, were discharged for the reason of their being daily employed outside the city limits, November 30.

Accidents.

I am pleased to report that no accident of a serious nature has occurred to any of the members of this department the past year.

Hiram Blood, engineer of Steamer No. 3, cut off the forefinger of his left hand with an axe, while splitting wood at the engine house on February 28.

Captain Francis P. Scanlan of Engine Co. No. 5, received severe injury to his right knee, by striking it against the frame of the chemical engine while riding to a fire March 19.

John Haley of Engine Co. No. 2, and John F. Brassell of Engine Co. 3, were painfully burnt on the hands and arms while working at a fire July 21.

Conclusion.

In conclusion I desire to extend my sincere thanks to his Honor the Mayor for his uniform courtesy to me, and for the deep interest manifested by him in all matters pertaining to this department.

To the City Council and Joint Standing Committee on Fire Department I also return thanks for their close attention to the requirements of the service.

My thanks are also due the officers and members of this department for the prompt and faithful discharge of their duty.

Respectfully submitted,

THOMAS J. CASEY,
Chief Engineer.

APPENDIX.

Joint Standing Committee on Fire Department.

Aldermen.

P. ALLEN LINDSEY, WILLIAM T. NEILON.

Councilmen.

WILLIAM H. EVELETH, JAMES H. MCPECK, FRANKLIN W. HAYNES.

Board of Engineers.

Chief Engineer and Superintendent of the Fire Alarm Telegraph.

THOMAS J. CASEY.

Salary, $1,500. Residence, 173 Cambridge Street

First Assistant Engineer and Secretary ofthe Board (Call).

NATHANIEL W. BUNKER.

Salary, $400. Residence, 6 Beech Street.

Second Assistant Engineer (Call).

CHARLES W. BRACKETT.

Salary, $375. Residence, 133 Mt. Auburn Street.

Third Assistant Engineer (Call).

WILLIAM B. CADE.

Salary, $375. Residence, 27 Park Street.

Engine Company No. 1.

House, Brattle Square.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
1	Edwin E. Priest........	Engineer............	51	46 Winthrop st......	$1,080
2	Hiram W. Hooker......	Driver of engine....	50	Engine house.......	900
3	Charles R. Hooker......	Driver of hose.......	44	15 Eliot st...........	900
	Call Force:				
23	John H. Brown.........	Foreman............	37	35 Pleasant st.	220
24	Daniel E. Shea..........	Assistant Foreman	32	Murray st........	210
25	James Jefferson........	Fireman of engine..	35	9 Eliot st	200
28	William H. Emory......	Hoseman............	55	141 Mt. Auburn st...	200
26	John L. Jones, Jr.	"	37	650 Main st..........	200
30	James McLean....... ..	"	28	61 Boylston st.......	200
27	Albert L. Landerkin....	"	34	16 Surrey st.........	200
29	Edward A. Hurd........	"	38	Palmer st........	200
31	Daniel E. Powers.......	"	29	19 DeWolf st........	200

Engine Company No. 2.

House, Main Street near Winsor.

No. of Badge	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
4	Thomas Wiseman......	Engineer............	44	392 Main st..........	$1,080
5	John H. Walker.......	Driver of engine....	59	7 Winsor st..........	900
6	Albert F. Sawyer.......	Driver of hose	45	19 Cherry st.........	900
	Call Force:				
32	James Cunningham....	Foreman.............	46	25 State st...........	220
33	Arthur C. Day	Assistant Foreman.	51	47 Austin st.........	210
34	William Parks	Fireman of engine.	44	9 Winsor st..........	200
35	Benjamin D. Foss	Hoseman............	52	21 Cherry st.........	200
36	John McCarthy	"	38	16½ Clark st..	200
37	John Haley	"	34	1 School st	200
38	Charles H. Chapman....	"	35	401½ Main st........	200
39	Warren H. Dow.........	"	38	414 Main st..........	200
40	John G. Hicks...........	"	46	78 Pleasant st	200

Engine Company No. 3.

House, Fourth Street near Cambridge.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
7	Hiram Blood............	Engineer............	56	40 Fifth st...........	$1,080
8	Peter F. McSorley......	Driver of engine....	29	33 Fourth st	900
9	Lorenzo H. Dale	Driver of hose	46	94 Gore st...........	900
	Call Force:				
43	William F. Newman....	Foreman	42	42 Winter st.........	220
44	Edwin Winward.......	Assistant Foreman.	44	96 Thorndike st	210
45	Eliot E. Alley...........	Fireman of engine..	52	73 Thorndike st	200
42	Walter Baker...	Hoseman............	34	91 Gore st	200
46	Timothy J. Mahoney....	"	40	100 Vine st	200
47	Louis J. Stanger........	"	34	57 Vine st	200
41	William H. Cairns......	"	25	20 Fourth st.........	200
48	John F. Brassel.........	"	31	12 Warren st	200
49	Patrick J. Hayes........	"	25	92 Gore st	200

Engine Company No. 4.

House, North Avenue near Russell Street.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
10	John E. Ricker	Engineer............	44	7 Orchard st.........	$1,080
11	George E. Muzzey	Driver of engine....	46	221 North avenue ...	900
12	Sylvanus G. Griffin.....	Driver of hose	41	Engine house	900
	Call Force:				
53	Edgar H. Locke	Foreman	41	164 Elm st...........	220
52	William J. Hanna	Assistant Foreman.	42	9 Rice st.............	210
57	Benjamin Young........	Fireman of engine..	44	Engine house	200
58	Arthur C. Griffin........	Hoseman............	38	26 Rice st............	200
56	Josiah P Parsons.......	"	40	185 North avenue....	200
50	George F. Tibbetts......	"	48	6 Beech st...........	200
54	Nicholas J. Penney....	"	30	7 Frank st...........	200
55	Jeremiah O'Connor.....	"	30	Montgomery st..	200
51	Daniel McCaughin......	"	28	5 Russell st..........	200

Engine Company No. 5.

House, Inman Square.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
13	Charles E. Conner	Engineer	38	511 Cambridge st	$1,080
14	Joseph P. Cartwright	Driver of engine	52	529 Cambridge st	900
15	Francis P. Carr	Driver of hose	44	195 Hampshire st	900
	Call Force:				
59	Francis P. Scanlan	Foreman	42	204 Hampshire st	220
60	Conrad D. Kinnear	Assistant Foreman.	49	284 Broadway	210
61	George W. McIntire	Fireman of engine	33	70 Inman st	200
62	John E. Fitzgerald	Hoseman	41	46 Washington st	200
63	Frank C. Mullett	"	36	15 Suffolk st	200
64	William T. King	"	32	Engine house	200
65	James F. Glynn	"	38	284 Broadway	200
66	Hugh T. Barker	"	37	108 Prospect st	200
67	George P. Bannister	"	27	414 Main st	200

Chemical Engine Company No. 1.

House, Western Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
17	Lewis C. Clark	Engineman	44	Engine house	$900
18	William H. Foss	Driver of engine.	49	Engine house	900
	Call Force:				
94	George W. Butler	Hoseman	46	26½ River st	200

Relief Engineer.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
16	William H. Lydston	Engineer	41	30 Pearl st	$1,080

Hook and Ladder Company No. 1.

House, Brattle Square.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
19	Albert S. Benson	Driver	44	54 Boylston st	$900
	Call Force:				
69	Charles Emerson	Foreman	43	14 Wright st	220
75	James P Ewell	Assistant Foreman.	52	53 Franklin st	210
73	Charles H. Waite	Ladderman	42	52 Pine st	200
76	Charles A. Sharon	"	39	Rear 13 Pine st	200
78	William R. Mitchell	"	36	15 Charles River st	200
79	John A. Bartlett	"	58	132 Auburn st	200
80	John H. McDermott	"	38	11 Dodge st	200
71	John T. McNamee	"	33	12 Eliot st	200
68	James H. Furfey	"	31	23 Prince st	200
74	James W. Irwin.	"	34	60 Boylston st	200
77	Thomas H. Kneeland	"	25	18 Mill st	200
72	William Stolba	"	31	53 Holyoke st	200
70	Thomas H. Donlan	"	27	31 Bow st	200

Hook and Ladder Company No. 2.

House, Portland Street.

No. of Badge.	Name.	Rank.	Age.	Residence.	Salary per yr.
	Permanent Force:				
21	Thomas L. Hunter......	Foreman	48	5 Winsor st..........	$900
20	Thomas Minnaugh......	Driver...............	35	33 Warren st.........	900
	Call Force:				
81	James F. Dalton........	Assistant Foreman.	51	17 Squire's court....	210
87	Joseph E. Chick	Ladderman	38	14 Seventh st........	200
82	Orvill W. Van Duzee....	"	42	82 School st..........	200
86	William Haley..........	"	40	225 Broadway........	200
91	Lincoln E. Wheeler.....	"	44	231 Broadway	200
92	John Gaughan..	"	46	25 Ninth st..........	200
90	Albert Smith............	"	34	23 Hamilton st.....	200
89	Andrew Burke..........	"	45	87 Vine st	200
84	John B. Maguire........	"	29	16 Seventh st........	200
85	Thomas F. O'Connell...	"	27	14 Ninth st..........	200
83	Joseph B. Farmer	"	50	46 Winsor st.........	200
88	Charles H. Cutting......	"	35	4 Eaton st...........	200

Fire Alarm Telegraph.

Battery Room, Brattle Square Building.

Name.	Rank.	Age.	Residence.	Salary per yr.
Permanent Force:				
George J. Blaisdell..............	Assistant Sup't.....	44	46 Winthrop st......	$1,080
Arthur W. Daniels.............	Repairer	35	12 Appian way......	900
David J. Campbell	Batteryman.........	41	Fire Alarm Station.	480

FIRES AND ALARMS.

FROM DECEMBER 1, 1887, TO DECEMBER 1, 1888.

DECEMBER.

Sunday, Dec. 4, 1.19 a. m. Box 6.

Rear 35 Main Street. Owned and occupied by A. S. Mansfield for the manufacture of gas. Loss, $100. No insurance. Supposed cause, incendiary.

Thursday, Dec. 15, 10.21 a. m. Box 26.

Osborn Street. Owned by Allen & Endicott. Occupied by Schaeffer Electric Manufacturing Co. Loss, $546. Insurance, $12,000. Cause, ignition of oil gas.

Monday, Dec. 19, 6.03 p. m. Box 13.

No. 137 Cambridge Street. Owned by W. L. Lockhart. Occupied by G. W. Marsh as dwelling. Loss, trifling. Cause, breaking of kerosene lamp.

Monday, Dec. 26, 9.21 a. m. Box 16.

No. 91 Broadway. Owned by Coleman Bros. Occupied by F. H. Brown as dwelling Loss, trifling. Cause, defective chimney flue.

Saturday, Dec. 31, 9.15 a. m. Still.

Murray Street. Owned and occupied by James McMahan as dwelling. No loss. Cause, soot in chimney taking fire.

JANUARY.

Friday, Jan. 6, 11.43 a. m. Box 14.

No. 136 Otis Street. Owned and occupied by F. H. Stickney as dwelling. Loss, $15. No insurance. Cause, defective chimney.

Friday, Jan. 13, 3.16 p. m. Box 68.

No. 127 North Avenue. Owned and occupied by J. M. W. Hall as dwelling. Loss trifling. Cause, hot ashes in barrel.

Friday, Jan. 13, 5 p. m. Still.

No. 4 South Street. Owned and occupied by Samuel Holt as dwelling. Loss, $10. Cause, clothes falling on stove.

Saturday, Jan. 21, 6.20 a. m. Still.

No. 30 Jay Street. Owned and occupied by M. E. Stewart as dwelling. Loss $23. Insurance, $1,200. Originated in cellar. Cause, lamp setting fire to incubator.

Sunday, January 22, 12.28 a. m. Box 36.

Rear No. 7 Essex Street. Owned and occupied by Wentworth Brothers as boarding stable. Loss, $512. Insurance, $1,575. Originated in office near stove. Cause, unknown.

Sunday, Jan. 22, 8.30 a. m. Box 32.

No. 170 Norfolk Street. Owned by J. S. Dwyer. Loss, $40. Insurance, $2,500. Occupied by several families as dwellings. Cause, thawing out water pipe.

Tuesday, Jan. 24, 1.24 p. m. Box 42.

No. 130 River Street. Owned by J. A. Holmes. Occupied by Dennis O'Leary as dwelling. Loss, trifling. Originated in attic. Cause, unknown.

Tuesday, Jan. 24, 11.51 p. m. Box 41.

No. 14 Rockwell Street. Owned and occupied by Mrs. Emma Natal as dwelling. Loss, $130. Insurance, $1,200. No. 16. Owned by E. C. Campbell. Loss, $15. Insurance, $1,200. Occupied as dwelling. Originated in cellar of No. 14. Cause, thawing out water pipe.

Wednesday, Jan. 25, 7.48 a. m. Box 9.

No. 31 East Street. Owned by Holt & Bugbee. Loss, $150. Insurance, $1,500. Occupied by Daniel Donovan as dwelling. Cause, thawing out water pipe.

Wednesday, Jan. 25, 3.25 p. m. Boxes 38-24.

Rear No. 172 Pearl Street. Owned and occupied by C. L. Jones & Co. as soap manufactory. Loss, $2,500. Insurance, $5,000. Originated in room occupied for the storage of boxes. Cause unknown.

Thursday, Jan. 26, 8.50 p. m. Still.

Dyke Street. Occupied by Thomas Colleen as dwelling. Loss trifling. Cause, breaking of oil lamp.

Saturday, Jan. 28, 10.21 a. m. Box 59.

Harvard Street. Smoke mistaken for fire.

Sunday, Jan. 29, 11.13 a. m. Box 25.

No. 74 Sidney Street. Owned by Eames' heirs. Loss, $37. Insurance, $2,500. Occupied by F. C. Troupe as dwelling. Cause, defective chimney flue.

Sunday, Jan. 29, 5.35 p. m. Box 26.

State Street. Owned by M. E. Rideout. Loss, $180. Insurance, $2,000. Occupied by C. A. Cook & Co. as wood workers. Loss, $320. Insurance. $600. Occupied by Llewellyn Landerkin as machinist. Loss, $50. No insurance. Occupied by Charles Harlow as trunk box maker. Loss, $30. Insurance, $200. Originated in C. A. Cook & Co.'s. Cause, spontaneous combustion.

FEBRUARY.

Saturday, Feb. 4, 3.25 a. m. Still.

No. 4 Divinity Avenue. Owned by Harvard College. Loss, $174. Insurance, $1,000. Occupied by C. R. Hazen as dwelling. Originated in a lounge in the basement. Cause, unknown.

Monday, Feb. 13, 11.10 a. m. Box 32.

Rear, 127 Elm Street. Owned by Patrick Ferry. Occupied by several families as dwellings. Originated among rags. Cause, unknown.

Thursday, Feb. 23, 8.20 p. m. Box 47.

Bigelow Street. Owned by Leander Greely. Unoccupied. No loss. Originated in cellar. Cause, ignition of oiled rags.

Saturday, Feb. 25, 6.24 p. m. Box 54.

No. 11 Frisbie Place. Owned by Harvard College. Occupied by J. B. Ames as dwelling. No loss. Cause, soot in chimney taking fire.

Monday, Feb. 27, 3.31 p. m. Box 26.

State Street. Owned and occupied by M. E. Rideout as boiler-room. Loss, trifling. Originated in shaving-blower and extended to roof. Cause, friction.

MARCH.

Monday, March 5, 6 p. m. Still.

Moore Street. Smoke mistaken for fire.

Tuesday, Mar. 6, 1.01 a. m. Box 32.

Rear 382 Cambridge Street. Owned by Oliver Hastings heirs. Loss, $50. No insurance. Occupied by Patrick Quinn as dwelling. Loss, $100. Insurance, $500. Cause, incendiary.

Tuesday, March 13, 1.45 a. m. Box 36.

Nos. 647 to 655 Main Street. Owned by E. R. Cogswell. Loss, $1,950. Insurance, $8,000. Occupied by Green & Co. as hardware and stoves. Loss, $2,830. Insurance, $3,000. Occupied by L. B. Chandler as provision store Loss, $125. Insurance, $1,200. Occupied by Samuel McIntire as grocery. Loss, $1,700. Insurance, $2,500. Occupied by A. J. LeBreque as milliner. Loss, $1,696. Insurance, $2,300. Originated in the cellar of Green & Co.'s store. Cause, unknown.

Saturday, Mar. 17, 7.57 a. m. Box 9.

No. 163 Bridge Street. Owned by Magdalena Lebert. Occupied by Frank Glaser as a stable. Loss, trifling. Cause, pipe smoking.

Sunday, Mar. 18, 11.45 p. m. Box 59.

Rear Harvard Street. Owned and occupied by the Porcellian Club as club room. Loss, trifling. Originated in clothing. Cause, unknown.

Monday, Mar. 19, 1.54 p. m. Box 26.

State Street. Owned and occupied by M. E. Rideout as boiler-room. Loss, trifling. Cause, sparks from furnace setting fire to roof.

Wednesday, Mar. 28, 1.19 a. m. Box 61.

Nos. 32 and 34 Mill Street. Owned by N. G. Gooch. Loss, $1,220. Insurance. $1,800. Occupied by A. W. Stearns estate as carpenter shop. Loss, $450. Insurance, $300. Occupied by John Nesbit as carpenter shop. Loss, $300. No insurance. Occupied by James Reed as fishing-rod manufactory. Loss, $2,000. Insurance, $1,000. Occupied by W. H. Davy as boat builder. Loss, $400. Insurance, $300. Originated in Stearns' carpenter shop. Cause, unknown.

APRIL.

Sunday, April 1, 1.22 a. m. Box 59.

Holyoke Street. Owned and occupied by Hasty Pudding Club as club room. Loss, trifling. Cause, ignition of oiled clothes placed in a barrel.

Monday, April 2, 7.42 p. m. Box 12.

North Street. Owned by New England Glass Co. Occupied by W. L. Libbey & Son as glass factory. No loss. Cause, ignition of oil.

Saturday, April 7, 9.53 a. m. Box 6.

No. 212 Third Street. Owned by Frederick Ayer. Loss, $35. Insurance, $7,000. Occupied by Louisa Shannahan as dwelling. Loss, $75. No insurance. Originated in clothes closet. Cause, unknown.

Sunday, April 15, 1.23 p. m. Box 37.

No. 41 River Street. Smoke mistaken for fire.

Wednesday, April 18, 9.07 a. m. Box 37.

No. 122 Auburn Street. Owned by George Parsons. Loss, $10. Insurance, $2,700. Occupied by R. M. Pierce as dwelling. Originated in a bedroom. Cause, supposed incendiary.

Friday, April 20, 5.02 a. m. Box 89.

Rear Concord Avenue. Owned and occupied by Parry Brothers as brick manufactory. Loss, $45. Insurance, $1,000. Originated in drying room. Cause, overheated furnace.

Monday, April 23, 8.32 p. m. Box 2.

Prison Point Street. Owned by Boston & Maine R. R. Co. Loss, trifling. Originated in a passenger car. Cause, unknown.

Tuesday, April 24. 8.29 a. m. Box 14.

No. 61 Sixth Street. Owned by Bessie Gribben. Loss, $127. No insurance. Occupied by William Gummo as dwelling. Originated in a closet in attic. Cause, children and matches.

Tuesday. April 24, 8.44 p. m. Box 34.

No. 55 Union Street. Owned by Mary A. Lewis. Occupied by James Campbell as dwelling. Loss, trifling. Cause, upsetting of kerosene lamp.

Saturday, April 28, 3.30 p. m. Still.

Bridge Street. Burning fence. Owned by J. P. Squire. Cause, set on fire by boys.

MAY.

Thursday, May 10, 7.55-8.00 a. m. Boxes 53 and 43.

Rear 35 Cowperthwaite Street. Owned by Catharine Lovett. Loss, $25. Insurance, $500. Occupied by G. E. Gordon as dwelling. Loss, $40. No insurance. Originated in a bedroom. Cause, careless use of matches.

Friday, May 11, 12.28 p. m. Box 36.

No. 552 Main Street. Owned by B. P. Clark. Loss, $15. Insurance, $3,000. Occupied by J. R. Thompson as cigar store. Loss, $66. Insurance, $1,500. Originated in the cellar. Cause, ignition of escaping gas.

Friday, May 18, 7.38 p. m. Box 13.

No. 91 Cambridge Street. Owned by Mary Parker. Occupied by McClosky & Harty as grocery. Loss, $240. Insurance, $3,000. Cause, upsetting of kerosene lamp.

Tuesday, May, 22, 2.52 a. m. Box 75.

Rear Walden Street. Owned and occupied by M. W. Sands as brick manufactory. Loss, $125. No insurance. Originated in drying room, Cause, overheated furnace.

Wednesday, May 30, 12.29 p. m. Box 89.

Concord Avenue. Fire in Belmont. Parry Brothers' barn.

Wednesday, May 30, 5.45 p. m. Still.

No. 286 Main Street. Ivers & Pond's piano manufactory. Cause, accidental automatic alarm.

JUNE.

Saturday, June 2, 11.18-11.22 p. m. Box 25.

No. 15 Blanche Street. Owned and occupied by Cushman Brothers & Co. as window shade manufactory. Loss, $375. Insurance, $2,000. Originated among oiled rags. Cause, spontaneous combustion.

Sunday, June 3, 6 p. m. Still.

No. 71 Boylston Street. Owned by West End Railway Co. Occupied by Michael Sullivan as dwelling. No loss. Originated in the L. Cause, unknown.

Monday, June 4, 8.20 a. m. Still.

No. 286 Main Street. Ivers & Pond's piano manufactory. Cause, accidental automatic alarm.

Tuesday, June 5, 11.40 p. m. Still.

No. 67 Boylston Street. Owned by Richard Beckett. Loss, $10. Insurance, $2,200. Unoccupied dwelling. Cause, incendiary.

Wednesday, June 6, 8.20 a. m. Box 91.

No. 25 Cedar Street. Owned by Catherine Holden. Loss, $75. No insurance. Occupied by James McCarvill as barn. Loss, $100. No insurance. Originated near a barrel of kerosene oil. Cause, unknown.

Wednesday, June 6, 7.24 p. m. Box 6.

No. 11 Broadway. Owned and occupied by Richard Beckett as dwelling. Loss, trifling. Originated on the roof. Cause, sparks from chimney.

Wednesday, June 13, 11.03 a. m. Box 28.

No. 123 Portland Street. Owned and occupied by John Sennett as dwelling. Loss, trifling. Originated on the roof. Cause, sparks from chimney.

Saturday, June 16, 9.39 p. m. Box 26.

No. 382 Main Street. Owned and occupied by D. C. Smart as wood working establishment. No loss. Originated in boiler-room. Cause. sparks from furnace.

Monday, June 18, 10.31 a. m. Box 59.

Nos. 23 and 25 Boylston Street. Owned by Gregory heirs. Occupied by several parties as stores and dwellings. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Monday, June 18, 11.53 a. m. Box 74.

No. 18 Railroad Street. Owned by Mary Nevins. Loss, $25. Insurance, $500. Occupied by Michael Gelant as dwelling. Originated on the roof. Cause, sparks from locomotive.

Monday, June 18, 8.55 p. m. Box 27.

No. 69 Moore Street. Owned and occupied by E. A. Percival as dwelling. Loss, trifling. Originated on the roof. Cause, fireworks.

Tuesday, June 19, 10.19 a. m. Box 39.

No. 12½ Magazine Street Court. Owned and occupied by R. G. Nixon as dwelling. Loss, $25. Insurance, $2,000, Originated in a clothes-closet. Cause, unknown.

Tuesday, June 19, 8.55 p. m. Still.

No. 68 School Street. Owned and occupied by John Coleman as dwelling. Loss, trifling. Cause, breaking of kerosene lamp.

Friday, June 22, 5 p. m. Box 32.

No. 122 Elm Street. Owned by Bernard Rafferty. Occupied by several families as dwellings. No loss. Originated amongst rubbish in cellar. Cause, unknown.

Saturday, June 23, 5.01 p. m. Box 59.

No. 6½ Brattle Street. Owned by Charles Moore. Loss, $212. Insurance, $10,000 Occupied by J. F. Noera as tailor. Loss, $1,450. Insurance, $4,000. Originated in a box of rags. Cause, supposed by sparks from stove.

Saturday, June 23, 7.15 p. m. Still.

No. 6½ Brattle Street. Rekindling of fire.

Tuesday, June 26, 6 p. m. Box 53.

No. 8 Charles River Street. Owned and occupied by John Ryan as dwelling. Loss, trifling. Originated in a clothes-closet. Cause, unknown.

Thursday, June 28, 8.51 a. m. Box 6.

Third Street. Owned by Frederick Ayer. Occupied by John Collins as blacksmith shop. Loss, trifling. Originated on roof. Cause, sparks from chimney.

Saturday, June 30, 12.15 a. m. Box 152.

Rear 9 Bow Street. Owned by Mullen heirs. Unoccupied outhouse. Loss, trifling. Cause, sparks from burning rubbish.

Saturday, June 30, 6.44 p. m. Box 27.

No. 13 Market Street. Owned by Samuel Saunders. Loss, $40. Insurance, $1,500. Occupied by H. B. Allen as dwelling. Cause, struck by lightning.

JULY.

Wednesday, July 4, 1.35 a. m. Box 72.

Cedar Street. False alarm.

Wednesday, July 4, 9.20 a. m. Still.

No. 116 Cambridge Street. Owned by H. D. Yerxa. Occupied by J. H. Carroll as dwelling. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Wednesday, July 4, 9.30 a. m. Still.

No. 74 Boylston Street. Owned by J. R. Pettingill. Occupied by C. H. Berry as machine shop. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Wednesday, July 4, 10.15 a. m. Still.

Rear 80 Boylston Street. Owned by Richard Beckett. Occupied by several families as dwellings. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Wednesday, July 4, 10.30 a. m. Still.

No. 70 Austin Street. Owned by L. B. Porter. Occupied by several families as dwellings. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Wednesday, July 4, 12.30 p. m. Box 49.

No. 9 Baldwin Court. Owned by Bryan Cahill. Occupied by G. R. Johnson as dwelling. Originated in L. Cause, fire-crackers.

Wednesday, July 4, 12.40 p. m. Still.

Fire in Boston, Brighton district. Wellington's coal-shed. Engine Co. No. 1 responded.

Wednesday, July 4, 2.40 p. m. Still.

No. 69 Otis Street. Owned and occupied by A. J. Green as dwelling. Loss, $15. Insurance, $2,000. Originated in an awning. Cause, fire-crackers.

Wednesday, July 4, 2.57 p. m. Box 41.

No. 125 Pleasant Street. Owned and occupied by E. J. MacConnell heirs as dwelling. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Wednesday, July 4, 4.15 p. m. Box 32.

No. 375 Cambridge Street. Owned and occupied by E. A. George as dwelling. Loss, trifling. Originated on the roof. Cause, fire-crackers.

Wednesday July 4, 6.22 p. m. Box 134.

No. 32 Tremont Street. Owned by S. H. Adams. Loss, $182. Insurance, $2,800. Occupied by F. S. Adams as dwelling. Loss, $98. Insurance, $1,000. Originated on the roof. Cause, fire-crackers.

Wednesday, July 4, 7.15 p. m. Still.

No. 28 Boylston Street. Burning of an awning. Cause, fire-crackers.

Wednesday, July 4, 8.02 p. m. Box 69.

Groveland Street. Owned by John Rindge. Occupied by Peter Gray as dwelling. Loss, trifling. Originated on the roof. Cause, fireworks.

Wednesday, July 4, 11.52 p. m. Box 41.

No. 131 Pleasant Street. Owned and occupied by P. D. Collins as coal-shed and stable. Loss, $30. Insurance, $900. Cause, incendiary.

Sunday, July 8, 10.23 a. m. Box 24.

No. 8 Lopez Street. Owned by Ann Kelley. Loss, $100. Insurance, $800. Occupied by J. N. Whalan as dwelling. Loss, $75. No insurance. Originated in a clothes-closet. Cause, child and matches.

Monday, July 9, 7 p. m. Still.

No. 217 North Avenue. Owned by Daniel O'Connell. Occupied by T. C. Smith as dwelling. Loss, trifling. Originated on the roof. Cause, fireworks.

Wednesday, July 11, 2.27 p. m. Box 17.

No. 16 Portland Street. Owned and occupied by Julia Carney as dwelling. Loss, $15. Insurance, $1,000. Originated in the roof. Cause, supposed by sparks from chimney.

Saturday, July 21, 10.47–11.18 p. m. Box 17.

Nos. 242-246 Main Street. Owned by John Stewart. Loss, $9,000. Insurance, $6,000. Occupied by S. A. Stewart & Co. as storage for carriages. Loss, $15,439. Insurance, $12,000. Occupied by Hugh Stewart as carriage builder. Loss, $11,222. Insurance, $6,000. Occupied by William Hackett as stable. Loss, $4,300. Insurance, $2,600. Occupied by

Michael Ryan as stable. Loss, $625. Insurance, $600. Military equipments in charge of Michael Ryan and owned by the State of Massachusetts and City of Boston. Loss, $700. No insurance. Originated in stable. Cause, unknown.

Saturday, July 21, 11.35 p. m. Box 16.

No. 111 Broadway. Owned by Carter heirs. Occupied by Richard Ela as store-house. Loss, trifling. Originated on the roof. Cause, sparks from burning building.

Tuesday, July 24, 2.10 a. m. Box 36.

No. 565 Main Street. Owned by Rufus Lamson estate. Loss, $175. Insurance, $14,000. Occupied by Union Pacific Tea Co. as store. Loss, $60, Insurance, $1,500. Occupied by Joseph Brignoli as storage for fruit. Loss, $30. No insurance. Originated in basement. Cause, peanut roaster placed near wood-work.

Friday. July 27, 9.12 p. m. Box 32.

No. 441 Cambridge Street. Owned by W. L. Lockhart. Occupied by F. H. Meggett as boot and shoe store. Loss, $10. Insurance, $3,000. Cause, breaking of kerosene lamp.

Tuesday, July 31, 3.51 p. m. Box 6.

No. 77 Broadway. Owned by H. W. Leach & Co. Loss, $150. No insurance. Unoccupied dwelling. Originated on the roof. Cause, sparks from chimney.

AUGUST.

Saturday. Aug. 4, 2 p. m. Still.

No. 93 Gore Street. Owned and occupied by Patrick Doherty as dwelling. Loss, $31. Insurance, $3,000. Originated on the outside of the building. Cause, children playing with fire.

Saturday, Aug. 4, 2.14 p. m. Box 28.

Rear 27 Webster Avenue. Owned and occupied by Patrick Roark as stable. Loss, trifling. Originated on the outside of building. Cause, children playing with fire.

Saturday, Aug. 4, 8.12 p. m. Box 91.

North Avenue. Owned and occupied by Boston & Maine R.R. Co. as passenger station Originated in partition. Supposed cause, rats and matches.

Monday, Aug. 6, 12.16 a. m. Box 91.

North Avenue. Owned and occupied by Boston & Maine R.R. Co. as passenger station. Loss, by both fires, $50. Insurance, $700. Originated in a closet where oil and matches were kept. Supposed cause, rats and matches.

Wednesday, Aug. 8, 1.14 p. m. Box 4.

No. 128 Gore Street. Owned by J. F. Pennell. Occupied by M. E. Begbrow as dwelling. Loss, trifling. Cause, rags in chimney flue taking fire.

Wednesday, Aug 8, 9.10 p. m. Still.

No. 498 Cambridge Street. Owned by E. J. Fuller. Occupied by Daniel Jordan as dwelling. Loss, trifling. Originated on the roof. Cause, sparks from chimney.

Monday, Aug. 13, 2.42 a. m. Box 72.

Rear 25 Reed Street. Owned and occupied by Jeremiah Keefe as stable. Loss, $435. Insurance, $400. Cause, unknown.

Friday, Aug. 24, 2.23 a. m. Box 10.

First Street. Owned by N. D. Woodbury. Occupied by Underhill & Anderson as wood-working establishment. Loss, trifling. Originated in fuel room. Cause, steam pipe setting fire to shavings.

Sunday, Aug. 26, 6.15 p. m. Still.

No. 2 Parnell Street. Owned by Charles Linehan. Occupied by Manuel Cunha as dwelling. Cause, explosion of kerosene oil can while building fire. Miss Mary Flora was fatally burned by her clothes catching fire.

Monday, Aug. 27, 4.27 p. m. Box 49.

No. 646 Cambridge Street. Owned by Emmons Raymond. Loss, $707. Insurance, $4,000. Occupied by G. F. Spencer as dwelling. Loss, $350. Insurance, $1,000. Cause, oil stove taking fire.

Wednesday, Aug. 29, 2.37 p. m. Box 25.

Austin Street. Cause, smoke mistaken for fire.

Thursday, Aug. 30, 12 p. m. Still.

No. 99 Washington Street. Owned by J. S. Pollard. Occupied by S. D. Hiscock as dwelling. No loss. Originated in the water-closet. Cause, lighted paper dropped into box of sawdust.

SEPTEMBER.

Saturday, Sept. 1, 3.50 p. m. Still.

No. 279 Cambridge Street. Owned by John Nixon. Occupied by several families as dwellings. No loss. Originated in the cellar. Cause, children setting fire to rubbish.

Saturday, Sept. 1, 7.04 p. m. Box 4.

No. 8 Seventh St. Owned by J. L. Coleman. Occupied by Jeremiah Mahoney as dwelling. Loss, trifling. Cause, breaking of kerosene lamp.

Thursday, Sept. 6, 10.40 a. m. Still.

No. 105 Fourth Street. Owned by Michael McGowan. Occupied by several families as dwellings. Loss, trifling. Cause, clothes near stove taking fire.

Saturday, Sept. 8, 10.55 p. m. Box 45.

No. 169 Franklin Street. Owned by G. J. Hobbs. Occupied by Catherine M. Woods as dry-goods. Loss, $475. Insurance, $800. Originated in cotton batting. Cause, unknown.

Tuesday, Sept. 11, 6.42 a. m. Box 125.

No. 39 Green Street. Owned by F. A. Kennedy. Occupied by several families as dwellings. Loss, trifling. Cause, burning of window curtain.

Wednesday, Sept. 12, 3.04 p. m. Box 37.

No. 11 Pleasant Place. Owned by O. R. Bobbins. Loss, $30. Insurance, $500. Occupied by J. H Freeman as dwelling. Loss, $50. No insurance. Cause, supposed by mice and matches. Originated in a bedroom.

Thursday, Sept. 13, 8.13 p. m. Box 46.

Rear 203 Franklin Street. Owned and occupied by Michael Dennison as dwelling. Loss, $240. Insurance, $700. Originated in an unfinished attic. Cause, unknown.

Friday, Sept. 21, 2.22 p. m. Box 116.

Sixth Street. Owned by D. H. Andrews. Occupied by Boston Bridge Works. Loss, trifling. Cause, ignition of oil.

Friday, Sept. 28, 1.45 p. m. Still.

No. 27 Cogswell Avenue. Owned by Oliver Taylor heirs. Occupied by T. F. Brown as dwelling. No loss. Originated in the cellar. Cause, hot ashes.

OCTOBER.

Saturday, Oct. 13, 7.45 a. m. Still.

Fire in Boston. Brighton Dist. Engine Co. No. 1, rendered assistance.

Monday, Oct. 15, 11.30 a. m. Still.

Cottage Street, Somerville. Engine, Co. No. 4, rendered assistance.

Monday, Oct. 15, 12. 13 p. m. Box 45.

Soden Street. Cause, smoke mistaken for fire.

Tuesday, Oct. 1 , 9 p. m. Still.

No. 623 Main Street. Burning of an awning. Cause, fire-works.

Thursday, Oct. 18, 3.32 p. m. Box 78.

No. 17 Wyeth Street. Owned by J. F. Prince. Occupied by Mrs. George White as dwelling. Loss, trifling. Cause, defective flue.

Saturday, Oct. 20, 6.38 p. m. Box 53.

No. 3 Butler Court. No fire could be found. Alarm needless.

Tuesday, Oct. 23, 3.49 p. m. Box 16.

No. 77 Broadway. Owned by H. W. Leach & Co. Unoccupied dwelling. No loss. Originated on the roof. Cause, sparks from a chimney.

Saturday, Oct. 27, 6.16 a. m. Box 28.

No. 179 Broadway. Owned by O. S. Bullock. Loss, $425. Insurance, $1,600. Occupied by Clark & Co. as coffee manufactory. Loss, $650. Insurance, $1,000. Occupied by O. S. Bullock, as machine shop. Loss, $275. Insurance, $2,400. Originated in Clark & Co.'s. Cause, hot coffee in barrel.

NOVEMBER.

Friday, Nov. 2, 1.30 p. m. Still.

Nos. 435-441 Main Street. Owned by G. F. & H. M. Leonard. Loss, $100. Insurance, $15,000. Unoccupied stores and dwellings. Originated among chips and shavings. Cause, hot coals from a tinsmith's charcoal furnace.

Friday, Nov. 2, 4.15 p. m. Box 6.

No. 77 Broadway. Owned by H. W. Leach & Co. Unoccupied dwelling. No loss. Originated on the roof. Cause, sparks from a chimney.

Friday, Nov. 2, 8.53 p. m. Box 59.

No. 5 Harvard Square. Owned by William Read estate. Occupied as store and dwelling. Loss, trifling. Originated on the roof. Cause, fireworks.

Saturday, Nov. 3, 6.34 p. m. Box 26.

No. 382 Main Street. Owned by D. C. Smart. Occupied by several parties as woodworkers. No loss. Originated in the boiler-room. Cause, sparks from furnace, setting shavings on fire.

Monday, Nov. 5, 4.41 p. m. Box 17.

No. 39 Washington Street. Owned by John Dorr. Occupied by Augustus Pritchard as dwelling. Loss, trifling, Originated in a closet. Cause, unknown.

Wednesday, Nov. 7, 7.54 a. m. Box 37.

No. 127 Auburn Street. Owned by G. D. Chamberlain. Occupied by B. J. Watson as dwelling. Loss, trifling. Originated near stove. Cause, clothing taking fire.

Sunday, Nov. 11, 12.51 p. m. Box 137.

No. 35 Jay Street. Owned by G. D. Chamberlain. Occupied by Frank Charlton as dwelling. Loss, trifling. Cause, defective flue.

Saturday, Nov. 17, 10.08 p. m. Box 59.

College Yard, Stoughton Hall. Owned by Harvard College. Loss, $300. Insurance, $16,000. Occupied by students as dormitory. Loss, $1,000. No insurance. Originated on third floor. Cause, hot coals dropping from grate.

Saturday, Nov. 24, 10.23 a. m. Box 152.

Harvard Street. Cause, smoke mistaken for fire.

Tuesday, Nov. 27, 1 a. m. Still.

No. 127 Auburn St. Owned by G. D. Chamberlain. Loss, $15. Insurance, $1,000. Occupied by B. J. Watson as dwelling. Originated in the cellar. Cause, hot ashes.

HYDRANTS.

Ward One.

Appleton Street, corner Highland.
Ash Street, corner Acacia.
Baldwin Street, corner Emmons Place.
Banks Street, corner Flagg.
Banks Street, corner Cowperthwaithe.
Banks Street, corner Grant.
Bow Street, corner Linden (post).
Bow Street, opposite Arrow (post).
Boylston Street, corner Winthrop (post).
Boylston Street, corner Eliot (post).
Brattle Street, opposite the estates of Messrs. Longfellow and Hastings.
Brattle Street, corner Ash.
Brattle Street, corner Hilliard.
Brattle Street, corner Fayerweather (post).
Brattle Street, opposite University Press (post).
Brattle Street, corner Lowell.
Brattle Street, corner Fresh Pond Lane (post).
Brattle Street, front of Mrs. Wyeth's estate.
Brattle Street, corner Williard.
Brattle Street, corner Story.
Brattle Street, corner Channing.
Brattle Street, corner Lake View Avenue (post).
Brattle Street, corner Hawthorn (post).
Brattle Street, near Boylston (post).
Broadway, junction Cambridge Street.
Broadway, near junction Cambridge Street (post).
Broadway, corner Prescott Street.
Broadway, corner Trowbridge Street.
Broadway, corner Quincy Street.
Broadway, corner Ware Street.
Broadway, corner Ellery Street.
Buckingham Street, opposite Stevens' barn.
Buckingham Street, corner Concord Avenue (post).
Cambridge Street, corner Trowbridge.
Cambridge Street, front of Scientific School (post).
Cambridge Street, corner Quincy (post).
Cambridge Street, opposite Felton (post).
Cambridge Street, corner Ellery (post).
Chauncy Street, near Garden (post).
Chauncy Street, corner Langdon.
Church Street, corner Palmer.
Concord Avenue, opposite Craigie Street.
Concord Avenue, corner Follen Street (post).
Concord Avenue, corner Sparks Street (post).
Coolidge Avenue, between Mount Auburn Street and Cambridge Cemetery gate (2 posts).
Craigie Street, midway.
Craigie Street, near corner Sparks.
Cushing Street, opposite Cushing Place (post).
Cushing Street, opposite Vineyard (post).
Cushing Street, opposite Woodlawn Avenue (post).
Cushing Street, southerly end (post).
De Wolf Street, near Cowperthwaite.
Divinity Avenue, (post).
Dunster Street, corner South.
Dunster Street, corner Mt. Auburn.
Dunster Street, near Harvard Square (post).
Eliot Street, in elbow (post).
Eliot Street, corner Winthrop (post).
Ellery Street, corner Harvard (post).
Ellery Street, corner Main.
Ellery Street, east side, midway between Broadway and Cambridge Streets.
Elmwood Avenue, midway (post).
Everett Street, south side, midway between North Avenue and Oxford Street.
Fayerweather Street, opposite reservoir.

Flagg Street, corner Beaver (post).
Foster Street, corner Foster Place (post).
Garden Street, near Chauncy (post).
Garden Street, corner Mason.
Garden Street, corner Wallace.
Grant Street, corner De Wolf.
Hammond Street, near Howland (post).
Harvard Square, opposite Charles River Bank (post).
Harvard Street, junction Main (post).
Harvard Street, corner Remington.
Harvard Street, opposite Harvard Block (post).
Harvard Street, opposite Linden (post).
Harvard College grounds (3 posts).
Hawthorn Street, corner Acacia (post).
Holworthy Street, opposite school-house (post).
Holworthy Street, southerly end (post).
Irving Street, corner Cambridge (post).
Kirkland Street, corner Baldwin.
Kirkland Street, corner Trowbridge.
Kirkland Street, corner Irving.
Kirkland Street, corner Sumner.
Kirkland Street, corner Quincy.
Kirkland Street, opposite Memorial Hall.
Lake View Avenue, 500 feet from Brattle Street.
Lake View Avenue, near Brattle Street (post).
Lake View Avenue corner Huron Street (post).
Lake View Avenue. on Hill (post.)
Lake View Avenue, near engine house (post).
Langdon Street, in elbow, (post.)
Larch Street, 200 feet from Brattle (post).
Lexington Avenue (post).
Locust Street, corner Holworthy.
Main Street, corner Trowbridge.
Main Street, near Baptist Church.
Mellen Street, corner Oxford.
Mill Street, corner Holyoke (post).
Mill Street, corner Charles River.
Mt. Auburn Street, corner Brighton (post).
Mt. Auburn Street, opposite Athens.
Mt. Auburn and Bow Streets.
Mt. Auburn Street, corner Willard (post).
Mt. Auburn Street, corner Sparks (post).
Mt. Auburn Street, opposite McDonald's marble works (post).
Mt. Auburn Street, opposite railroad stables (post).
Mt. Auburn Street, near Lowell (post).
Mt. Auburn Street, corner Dunster (post).
Mt. Auburn Street, corner Holyoke (post).
Mt. Auburn Street, corner Athens (post).
Mt. Auburn Street, corner Banks (post).
Mt. Auburn Street, corner DeWolf (post).
Mt. Auburn Street, corner Story (post).
Mt. Auburn Street, corner Hilliard (post).
Mt. Auburn Street, opposite City Building (post).
Mt. Auburn Street, opposite Brewer (post).
Mt. Auburn Street, corner Auburn Place (post).
Mt. Auburn Street, opposite Bath (post).
Mt. Auburn Street, near Coolidge Lane (post).
Mt. Auburn Street, corner Elmwood Avenue (post).
Mt. Auburn Street, corner Channing (post).
Murray Street, near Charles River.
Murray Street, corner Lyman (post).
North Avenue, corner Chauncy Street.
North Avenue, corner Shepard Street (post).
North Avenue, corner Holmes Place.
North Avenue, corner Jarvis Street.
North Avenue, front of burial-ground (post).
North Avenue, corner Church Street
North Avenue, corner Garden Street (post).
Oxford Street, near Jarvis.
Oxford Street, corner Everett.
Phillips Place, corner Berkeley Street.
Prescott Street, corner Harvard.
Prescott Street, between Harvard Street and Broadway (post).
Putnam Avenue corner Western Avenue
Putnam Avenue, between Mt. Auburn and Main Streets (post).
Putnam Avenue, corner Flagg Street (post).
Putnam Avenue, opposite Putnam Court (post).
Putnam Avenue, near Hews Street (post).
Putnam Avenue, corner Sands Street (post).
Quincy Street, midway between Harvard and Broadway (post).
Riedesel Avenue, corner Brattle (post).
Sands Street, opposite planing-mill.
South Street, corner Dunster (post).
Sparks Street, corner Vassal Lane (post).
Sparks Street, corner Foster (post).
Sparks Street, opposite Charles T. Russell's (post).

Trowbridge Street, midway between Main and Harvard (post).
Waterhouse Street, opposite Concord Avenue (post).
Waterhouse Street, opposite Follen (post).
Wendell Street, near Carver (post).
Wendell Street, midway between North Avenue and Oxford Street (post).
Willard Street, corner Foster (post).
Worthington Street, near engine-house of Water Works (post).

Ward Two.

Amory Street, corner Summer (post).
Antrim Street, near Broadway (post).
Antrim Street, near Cambridge (post).
Antrim Street, midway (post).
Austin Street, near Essex (post).
Austin Street, corner Prospect (post).
Austin Street, corner Temple (post).
Bigelow Street, midway between Main and Harvard.
Brewery Street, near Hastings (post).
Bristol Street, corner Portland (post).
Broadway, corner Highland Avenue.
Broadway, corner Hancock Street.
Broadway, corner Antrim Street.
Broadway, corner Tremont Street (post).
Broadway, corner Elm Street.
Broadway, corner Pelham Street.
Broadway, corner Dana Street.
Broadway, corner Ellsworth Avenue.
Broadway, corner Fayette Street.
Broadway, corner Amory Street.
Broadway, corner Norfolk Street.
Broadway, corner Boardman Street.
Broadway, opposite Thayer's Laboratory (post).
Broadway, near Broadway House.
Broadway, corner Clark Street (post).
Broadway, corner Third Street (post).
Broadway, corner Davis Street (post).
Broadway, corner Brewery Street (post).
Broadway, opposite Mason & Hamlin's building (post).
Broadway, near Sixth Street (post).
Broadway, corner Pioneer Street (post).
Cambridge Street, corner Harding.
Cambridge Street, corner Norfolk.
Cambridge Street, corner Willow.
Cambridge Street, corner Prospect (post).
Cambridge Street, corner Tremont.
Cambridge Street, opposite Fayette.
Cambridge Street, corner Springfield.
Cambridge Street, opposite head of Maple Avenue.
Cambridge Street, corner Marion (post).
Cambridge Street, corner Elm (post).
Cambridge Street, corner Winsor (post).
Cambridge Street, near Mr. Rafferty's house (post).
Cambridge Street, nearly opposite Ellsworth Avenue (post).
Centre Street, opposite No. 14.
Clinton Street, near G. T. Gale's house (post).
Columbia Street, corner Lincoln.
Columbia Street, corner Market.
Columbia Street, corner Hampshire.
Columbia Street, corner Harvard.
Dana Street, corner Chatham (post).
Dana Street, between Broadway and Cambridge Street (post).
Davis Street, corner Broadway.
Elm Steeet, opposite Lincoln (post).
Elm Street, corner Market.
Essex Street, westerly side, midway between Harvard and Austin (post).
Fayette Street, 500 feet from Broadway (post).
Hampshire Street, corner Amory (post).
Hampshire Street, near Somerville line (post).
Hampshire Street, corner Portland (post).
Harvard Street, corner Pine.
Harvard Street, corner Hancock.
Harvard Street, corner Clark.
Harvard Street, corner Dana.
Harvard Street, corner Moore.
Harvard Street, corner Norfolk.
Harvard Street, corner Portland.
Harvard Street, corner Brewery.
Harvard Street, corner Clinton.
Harvard Street, near Railroad crossing (post).
Harvard Street between railroad crossing and Brewery Street (post).
Harvard Street, opposite Davis (post).
Harvard Street, corner Cherry (post).
Harvard Street, corner Winsor (post).
Harvard Street, opposite Elm (post).
Harvard Street corner Essex (post).
Harvard Street, corner Prospect (post).
Harvard Street, between Prospect and Inman (post).

Harvard Street, opposite No. 334 (post).
Harvard Street, corner Bigelow (post).
Harvard Street, corner Lee (post).
Highland Avenue, east side, midway.
Houghton Street, corner Bolton, in Somerville (post).
Hunting Street, 400 feet from Cambridge.
Inman Street, near Austin.
Inman Street, corner Harvard.
Inman Street, corner Broadway.
Inman Street, opposite No. 110 (post).
Inman Street, opposite Summer.
Jefferson Street, corner Harding.
Jefferson Street, corner Warren (post).
Jefferson Street, opposite Marion (post).
Lee Street, midway between Main and Harvard (post).
Main Street, corner Lee.
Main Street, corner Hancock.
Main Street, opposite Bay.
Main Street, corner Pelham (post).
Main Street, corner Essex (post).
Main Street, opposite Pleasant.
Main Street, corner Bigelow.
Main Street, junction Harvard.
Main Street, corner Pioneer (post).
Main Street, opposite Rawson & Hittinger's (post).
Main Street, opposite Pearl (post).
Main Street, Gale's driveway (post).
Main Street, corner Third (post).
Maple Avenue, midway between Broadway and Cambridge Street (post).
Market Street, corner Union.
Moore Street, head of Hastings.
Norfolk Street, corner Hampshire.
Norfolk Street, corner Worcester.
Norfolk Street, head of Washington (post).
Norfolk Street, opposite No. 95 (post).
Oak Street, west side, near Somerville line.
Oak Street, opposite Bolton in Somerville (post).
Plymouth Street, corner Berkshire.
Porter Street, corner Bedford (post).
Porter Street, corner Harding (post).
Portland Street, opposite rolling-mill (post).
Portland Street, corner York (post).
Prospect Street, opposite Mr. Tilton's.
Prospect Street, corner Broadway.
Prospect Street, corner Hampshire.
Prospect Street, corner Main.
Prospect Street, corner Gardner.
Prospect Street, opposite school-house in Somerville (post).
Prospect Street, corner Webster Avenue in Somerville (post).
Seckel Street, corner Webster Avenue (post).
South Street, corner Earl, in Somerville (post).
Tremont Street, near Wellington's house (post).
Tremont Street, near Hampshire (post).
Tremont Street, opposite Gardner (post).
Tremont Street, west side, 200 feet from Cambridge.
Union Street, corner Hampshire.
Ward Street, corner Horace, Somervile.
Washington Street, corner Munson (post).
Webster Avenue, corner Elm Street.
Webster Avenue, corner Bristol Street.
Webster Avenue, corner Winsor Street.
Webster Avenue, corner Hampshire Street.
Webster Avenue, corner Plymouth Street.
Webster Avenue, corner Cambridge Street (post).
West Boston Bridge.
West Boston Bridge.
West Street, midway (post).
Winsor Street, corner Lincoln.
Winsor Street, corner Hampshire.
Winsor Street, corner Washington.
Winsor Street, near Somerville line (post).
Winsor Street, corner Broadway (post).

Ward Three.

Binney Street, corner Ninth (post).
Binney Street, near railroad crossing (post).
Bridge Street, at Wellington's Wharf (post).
Bridge Street, at Sanborn's Wharf (post).
Bridge Street, corner Prison Point.
Bridge Street, corner Short.
Bridge Street, corner Short (post).
Bridge Street, near Cambridge (post).
Bridge Street, corner Water.
Bridge Street, near Bay State glass-house (post).
Bridge Street, north side, opposite Braman, Shaw & Co.'s.
Bridge Street, opposite Fourth (post).
Bridge Street, between Short and Water (post).

Bridge Street, corner Water (post).
Bridge Street, corner East (post).
Bridge Street, near bridge (post).
Cambridge Street, opposite First.
Cambridge Street, corner Carson.
Cambridge Street, corner Dailey's Alley (post).
Cambridge Street, corner Third.
Cambridge Street, junction Bridge.
Cambridge Street, corner Sixth.
Cambridge Street, near railroad crossing (post).
Cambridge Street, opposite Seventh (post).
Cambridge Street, opposite No. 141 (post).
Cambridge Street, near Third (post).
Cambridge Street, corner Fourth (post).
Charles Street, corner Fourth.
Charles Street, corner Third (post).
East Street, corner North (post).
Eighth Street, corner Cambridge.
Fifth Street, corner Winter (post).
Fifth Street, corner Charles.
Fifth Street, corner Spring.
Fifth Street, corner Cambridge.
Fifth Street, corner Gore.
Fifth Street, corner Bent (post).
Fifth Street, corner Rogers (post).
First Street, corner Charles (post).
First Street, near Otis (post).
First Street, corner Spring (post).
First Street, corner Vine (post).
Fourth Street, corner Winter (post).
Fourth Street, corner Winter.
Fourth Street, corner Cambridge.
Fourth Street, corner Vine.
Fourth Street, corner Thorndike.
Gore Street, corner Third (post).
Gore Street, corner Fourth.
Gore Street, corner Carson (post).
Gore Street, corner Seventh (post).
Gore Street, between Fourth and Fifth (post).
Gore Street, between Fifth and Sixth, (post).
Munroe Street, corner Third (post).
North Street, corner East.
North Street, opposite Short (post).
North Street, near Water (post).
Ninth Street, corner Thorndike (post).
Otis Street, corner Third.
Otis Street, corner Seventh.
Otis Street, corner Ninth (post).
Potter Street, corner Ninth (post).
Prison Point Street, 50 feet north of ice-sheds (post).
Prison Point Street, on railroad track 300 feet from street.
Prison Point Street, near passenger track (post).
Prison Point Street, on railroad track 600 feet from street.
Prison Point Street, 400 feet from Bridge Street.
Prison Point Street, near Bridge (post).
Prison Point Street, near ice-house (post).
Rogers Street, corner Third (post).
Second Street corner Thorndike.
Second Street, corner Otis.
Second Street, corner Cambridge.
Sixth Street, corner Gore.
Sixth Street, corner Potter (post).
Sixth Street, corner Charles (post).
Sixth Street, corner Spring (post).
Spring Street, corner Second.
Spring Street, corner Third.
Spring Street, corner Fourth.
Spring Street, corner Ninth (post).
Third Street, corner Vine.
Third Street, near Charles (post).
Third Street, corner Bridge (post).
Third Street, corner Potter.
Third Street, opposite gas works (post).
Thorndike Street, corner Sixth.
Thorndike Street, corner Fifth.
Thorndike Street, near Woodbury's mill (post).
Thorndike Street, corner Second (post).
Vine Street, corner Fifth.
Vine Street, corner Sixth.
Water Street, near sugar-house.
Yard of American Rubber Co. (post).

Ward Four.

Albany Street, corner Main (post).
Albany Street, opposite Portland (post).
Austin Street, corner Douglass (post).
Austin Street, corner Norfolk (post).
Blackstone Street, west side, 100 feet from Avenue (post).
Blackstone Street, opposite Riverside Press (post).
Brookline Street, corner Allston.
Brookline Street, corner Hamilton.
Brookline Street, corner Valentine.
Brookline Street, corner Putnam Avenue.

Brookline Street, corner Erie.
Brookline Street, corner Franklin.
Brookline Street, corner Chestnut.
Brookline Street, near Henry (post).
Brookline Street, corner Decatur (post).
Brookline Street, corner Lopez (post).
Brookline Street, corner Watson (post).
Central Square, (post).
Cherry Street, opposite Eaton.
Chestnut Street, corner Pearl.
Columbia Street, corner Austin.
Columbia Street, corner Washington.
Cottage Street, corner Pearl (post).
Eaton Street, corner Pine (post).
Erie Street, corner Pearl (post.)
Erie Street, between Pearl and Brookline (post).
Fairmont Street, corner Andrew (post).
Franklin Street, corner Soden (post).
Franklin Street, corner Hancock (post).
Franklin Street, corner Bay (post).
Franklin Street, near the hill (post).
Franklin Street, corner Sydney.
Franklin Street, midway between Brookline and Sydney (post).
Franklin Street, corner Magazine.
Franklin Street, corner Pleasant.
Franklin Street, near Putnam Avenue (post.)
Front Street, junction State.
Front Street, corner Columbia (post).
Green Street, opposite Vernon.
Green Street, corner Putnam Avenue.
Green Street, corner Hancock (post).
Green Street, corner Bay (post).
Green Street, midway between Hancock and Vernon (post).
Green Street, corner Vernon (post).
Green Street, corner Pleasant (post).
Green Street, corner Western Avenue (post).
Green Street, corner Pearl (post),
Green Street, corner Brookline (post).
Grigg Street, corner Putnam Avenue.
Henry Street, near Hastings (post).
Kinnaird Street, corner Bay (post).
Magazine Street, corner Cottage.
Magazine Street, corner Putnam Avenue.
Magazine Street, corner Warland.
Magazine Street, corner Auburn.
Magazine Street, corner Park.
Magazine Street, corner Upton.
Magazine Street, opposite Hamilton.
Magazine Street, opposite Allston (post).
Magazine Street, corner Florence.
Magazine Street, corner Green (post).
Main Street, corner Harrison (post).
Main Street, corner Winsor (post).
Main Street, corner Norfolk (post).
Main Street, junction Austin (post).
Main Street, north side, opposite Kennedy's bakery (post).
Main Street, corner Portland.
Main Street, opposite No. 461 (post).
Osborne Street, corner State (post).
Osborne Street, corner Main (post).
Pacific Street, corner Sydney.
Pacific Street, near Albany.
Pearl Street, corner Lake.
Pearl Street, corner Allston (post).
Pearl Street, corner Putnam Avenue.
Pearl Street, corner Decatur.
Pearl Street, corner Auburn.
Pearl Street, corner Glenwood (post).
Pleasant Street, corner Florence (post.
Pleasant Street, corner Upton.
Pleasant Street, corner Somerset.
Pleasant Street, corner Park.
Pleasant Street, corner Prince.
Pleasant Street, corner Pleasant Place (post).
Pleasant Street, corner Chestnut (post).
Pleasant Street, corner Franklin (post).
Portland Street, corner Main (post).
Putnam Avenue, opposite Ballard Place (post).
Putnam Avenue, near River Street (post).
Putnam Avenue, corner River Street (post).
Putnam Avenue, corner Walnut Court (post).
Putnam Avenue, between River and Pleasant Streets, (post).
Putnam Avenue, corner Waverly Street, (post).
Putnam Avenue, corner Pleasant Street (post).
River Street, corner Franklin.
River Street, opposite Cottage.
River Street, opposite Laurel.
River Street, corner Blackstone.
River Street, opposite Fairmont.
School Street, corner Clark.
School Street, corner Portland (post).
School Street, corner Clark (post).
School Street, corner Moore (post).
Somerset Street, corner Andrew (post).
State Street, opposite Village (post).
State Street, near Howe's Factory (post).
Sydney Street, corner Allston.
Sydney Street, corner Putnam Avenue.
Sydney Street, corner Chestnut.

Sydney Street, corner Front (post).
Sydney Street, corner Green (post).
Washington Street, corner Brewery (post).
Washington Street, corner Clark.
Washington Street, corner Portland (post).
Washington Street, corner Moore (post).
Waverly Street, corner Allston (post).
Western Avenue, corner Howard Street.
Western Avenue, near Dodge Street, (post).
Western Avenue, corner Kinnaird Street.
Western Avenue, corner Jay Street.
Western Avenue, opposite Soden Street (post).
William Street, between Magazine and River (post).

Ward Five.

Arlington Street, 500 feet from North Avenue (post).
Bates Street, (post).
Beech Street, east side, 20 feet from Orchard.
Bellevue Avenue, corner Avon Hill Street (post).
Belmont Street, corner Montgomery (post).
Blake Street, corner North Avenue (post).
Cedar Street, corner Spruce.
Cedar Street, opposite Norris.
Cedar Street, corner Dudley (post).
Cogswell Avenue, corner Mead Street.
Concord Avenue, corner Madison Street.
Concord Avenue, opposite Bond Street.
Concord Avenue, corner Walden Street.
Concord Avenue, opposite Eame's estate (post).
Crescent Street, corner Sacramento (post).
Donnell Street, corner Garden.
Dublin Street, 525 feet from Spruce.
Dublin Street, 620 feet from Walden.
Dublin Street, corner Walden.
Dublin Street, corner Bolton.
Dublin Street, corner railroad (post).
Fairfield Street, opposite Mr. Whitney's.
Forest Street, corner Frost (post),
Garden Court, corner Dublin Street.
Garden Street, opposite Bond.
Garfield Street, (post).
Garfield Street, corner Oxford (post).
Garfield Street, corner North Avenue (post).
Gray Street, corner Norton (post).
Harris Street, corner Frost (post).
Harvey Street, opposite Montgomery.
Hollis Street, at the elbow.
Hubbard Avenue, opposite brick block.
Hubbard Avenue, corner Raymond Street.
Lambert Avenue, corner Walnut Avenue post).
Lambert Avenue, corner North Avenue post).
Lambert Avenue, corner Lancaster Avenue (post).
Lancaster Avenue, corner Agassiz Street (post).
Linnæan Street, corner Avon.
Linnæan Street, corner Bowdoin.
Linnæan Street corner Raymond.
Martin Street, corner Hurlbut (post).
Milk Street, corner White (post).
Montgomery Street, 300 feet from Harvey (post).
Mt. Vernon Street, corner North Avenue (post).
Norris Street, midway (post).
North Avenue, near railway bridge.
North Avenue, corner Cogswell Avenue.
North Avenue, corner Allen Street.
North Avenue, corner Dover Street (post).
North Avenue, 300 feet west of tannery.
North Avenue, corner Sacramento Street.
North Avenue, opposite Linnæan Street.
North Avenue, corner Chester Street (post).
North Avenue corner Arlington Street.
North Avenue, corner Rice Street.
North Avenue, corner Cedar Street.
North Avenue, opposite Tannery.
North Avenue, opposite No. 368 (post).
North Avenue, near Walcott Richardson's gate.
North Avenue, corner Beech.
North Avenue, opposite No. 270 (post).
North Avenue, corner Day Street.
North Avenue, opp. school-house (post).
Orchard Street, near Davenport (post).
Orchard Street, opposite Tenney Court.
Oxford Street, corner Forest.
Oxford Street, corner Sacramento.
Pemberton Street, 500 feet from North Avenue (post).
Pemberton Street, corner Fairfield (post).
Raymond Street, south side (2) near Mr. Dresser's estate.

Reed Street, 250 feet from Harvey.
Reed Street, opposite school-house.
Rice Street, opposite L. L. Cushing's.
Richdale Avenue, corner Raymond Street.
Richdale Avenue, near Raymond Street (post).
Roseland Street, corner Frost.
Shepard Street, corner Avon.
Spruce Street, corner Hollis.
Spruce Street, corner Jackson (post).
Spruce Street, corner Reed.
Spruce Street, corner Montgomery.
Spruce Street, opposite school-house.
Spruce Street, corner Clay.
Spruce Street, corner Clifton.
Tannery Street, (3) between North Avenue and almshouse (posts).
Tuttle Street, opposite Ladd's barn.
Walden Street, corner Mead.
Walden Street, corner North Avenue (post).
Walden Street, corner Hubbard Avenue.
Wallace Street, in the elbow.
Washington Avenue,corner Dexter (post).
Washington Avenue, corner Hillside Avenue (post).
Washington Avenue, 400 feet from Linnæan Street (post).
Wyeth Street, corner Garden.

RESERVOIRS.

Ward One.

College Yard.
Garden Street, north end of Appian Way.

Ward Two.

Essex Street, corner Austin.
Harvard Street, opposite Broadway Park.

Ward Three.

Cambridge Street, 70 feet east of Third.
Gore Street, cor North Third.
Junction Bridge and Gore Streets.
Otis Street, corner Fourth.
Thorndike Street, corner Third.
Under New England Glass Company's building.
Under Lowell Railroad machine-shop.

Ward Four.

Junction Western Avenue and Pleasant Street.
Main Street, corner Brookline.

CAMBRIDGE FIRE-ALARM TELEGRAPH.

Location of Boxes.

2. Prison Point Street, corner Bridge.
4. Gore, J. P. Squire's Building.
6. Third, corner Broadway.
6. W. B. Bridge, Transfer Station (duplicate).
7. Third, corner Bent.
8. Thorndike, corner Third.
9. Cambridge, near First.
10. Thorndike, near First.
12. Third, corner Winter.
12. North, corner Water (duplicate).
13. Fourth, Engine House No. 3.
14. Sixth, corner Cambridge.
15. Vine, corner Fifth.
16. Broadway, Greely's mill.
17. Washington, corner Brewery.
21. Sydney, corner Allston.
23. Pearl, corner Auburn.
24. Brookline, corner Valentine.
25. Lafayette Square.
26. Main, corner Osborn.
27. Clark, corner Harvard.
28. Broadway, near Brewery.
29. Pine, corner Washington.
31. Cambridge, corner Harding.
32. Columbia, corner Cambridge.
34. Hampshire, corner Columbia.
35. Harvard, corner Norfolk.
36. Main, corner Prospect.
37. Junct. Pleasant and River Streets.
38. Magazine, corner Lake.
39. Magazine, corner Chestnut.
41. Pleasant, corner Fairmont.
42. Blackstone, opposite Riverside Press.
43. Banks, corner Flagg.
45. Franklin, corner Soden.
46. Main, corner Hancock.
47. Broadway, corner Antrim.
48. Hampshire, Engine House No. 5.
49. Cambridge, corner Baldwin.
51. Broadway, corner Ellery.
52. Junction Main and Mt. Auburn Sts.
53. Mt. Auburn St., cor. Holyoke Place.
54. Cambridge St., Memorial Hall.
56. Kirkland, corner Sumner.
57. Oxford, corner Mellen.
59. Harvard Square, Ramsay's Drug Store.
61. Brattle Square, City Building.
62. Mt. Auburn, corner Hilliard.
63. Junction Brattle and Mason Sts.
64. Junction Concord Ave. and Garden Streets.
65. North Avenue, corner Shepard.
68. North Avenue, near Railroad Bridge.
69. North Avenue, corner Day.
71. North Avenue, near Tannery.
72. Cedar, corner Dudley.
73. Spruce, near Bay State Brick Yard.
74. Dublin, corner railroad.
75. Walden, corner Raymond.
76. Walnut Avenue, corner Arlington Street.
78. Concord Avenue, corner Sparks.
79. Brattle, corner Sparks.
82. Brattle St., corner Elmwood Ave.
83. Mt. Auburn, near Railroad Stable.
87. Lake View Ave., near Concord Ave.
89. Concord Avenue, near Hittinger's Ice House.
91. North Avenue, Railroad Stable.
92. Locust, corner Cushing.
114. Ninth, Goepper Bros. barrel factory.
116. Broadway, Tower's piano-key factory.
125. Green St., F. A. Kennedy's cracker bakery.
134. Tremont, corner Hampshire, City Stable.
137. Western Avenue, corner Howard.
152. Junction Main and Bow.
158. Oxford, corner Harris.
168. North Avenue, Engine House No. 4.
216. Ninth, rubber factory yard.
242. Albro, electric light works.

Instructions to Key Holders.

Alarms to be given from the box nearest the location of the fire.

Do not give an alarm for a fire seen at a distance, unless assistance is called for.

To give an alarm, open the door, pull the hook to the bottom of the slot once, and let go. Each box contains a small bell, which, if heard before you pull, indicates that an alarm has been previously given, and by listening at the box you will learn the number of the box from which the alarm was given, but in no case will you pull while the alarm is striking. After giving the alarm, remain at the box, so as to direct the firemen to the fire. Be sure that you lock the box before leaving it.

Citizens are requested to inform themselves where keys to the signal boxes are kept, signs suitably inscribed being placed over each box, giving the requisite information.

Instructions to Firemen

First alarm will be given by striking *three* or more rounds.

Second alarm will be given by repeating the first.

General alarm will be given by striking *three blows* on the gongs and bells.

In cases where hook and ladder companies only are wanted, the call will be given by striking *five blows.*

Companies not required to respond to first or second alarms will be notified of the extinguishment of a fire by *two blows* on the gongs, that their services will not be needed, and that order have been given to "make up." Should an alarm be given from any box while a portion of the department is engaged at a fire, the apparatus not in service will respond.

REPORT

OF THE

CHIEF OF POLICE.

To the Honorable Mayor and City Council:—

GENTLEMEN: In compliance with the city ordinance I have the honor to present my annual report of the work of the Police Department for the year ending November 30, 1888.

Whole number of arrests		1,469
Males	1,306	
Females	163	
Adults	1,139	
Minors	330	

Causes of Arrests.

Assault and battery	163
Assault on officer	3
Assault, felonious	3
Adultery	1
Arson	1
Adulterated milk	1
Bastardy	1
Bigamy	1
Breaking and entering	33
Capias	7
Carrying concealed weapons	1
Concealing leased property	4
Contempt of court	1
Common drunkard	2
Cruelty to animals	4
Defrauding boarding-house	1
Delirium tremens	2
Default warrants	2
Disturbing public meeting	1
Disturbing the public peace	56
Disturbing public school	2
Disorderly conduct	14
Distributing and exposing poisons	1
Amount brought forward	305

Amount carried forward		305
Deserter		1
Drunkenness		653
Embezzlement		10
Escaped prisoners		10
Extortion		1
False pretences		2
Forgery		2
Furnishing opium		1
Giving liquor to prisoners		1
Insane		29
Idle and disorderly		5
Keeping unlicensed dog		2
Keeping disorderly house		1
Larceny, simple		139
Larceny from building		40
Liquor nuisance		14
Malicious mischief		17
Murder		1
Neglected children		15
Non-support		15
Peddling without a license		9
Polygamy		1
Robbery		2
Rude and disorderly conduct		1
Receiving stolen property		1
Safe keeping		6
Stealing a ride		5
Stubborn children		7
Suspicious persons		8
Surety of the peace		13
Selling tobacco to minors		1
Truants		5
Using profane language		14
Vagrancy		21
Violation of the city ordinance		39
Violation of the Sunday law		3
Violation of the liquor law		36
Violation of the Lord's day		8
Violation of the milk law		5
Wilful trespass		20
Total		1,469
Whole number of lodgers		921
Males	877	
Females	44	
Adults	856	
Minors	65	
Amount of property reported stolen		$3,805 80
Amount of property reported recovered		3,929 75

Miscellaneous Business.

Accidents reported	81
Buildings found open and secured	227
Cases investigated	659
Dangerous buildings	3
Dangerous chimneys	5
Dead bodies found	10
Defective cesspools	48
Defective gas pipes	14
Defective drains and vaults	13
Defective hydrants	8
Defective streets and sidewalks	743
Defective water pipes	5
Defective lamps	51
Disturbances suppressed	350
Dogs killed	48
Extra duty done by officers (days)	527
Fire alarms given by officers	17
Fires extinguished without alarm	20
Intoxicated persons helped home	9
Lost children restored	139
Sick and injured persons assisted	11
Stray teams put up	41
Street obstructions removed	47
Water running to waste	41

City Property in use by Police Department.

85 badges	$122 00
100 billies	50 00
18 buckets	9 00
130 billies and belts	175 00
2 bookcases	12 00
4 bedsteads	12 00
8 books	26 00
2 brooms	50
2 bureaus	3 00
1 buggy	50 00
Bedding and blankets	30 00
8 clocks	30 00
2 cot beds	3 00
50 chairs	40 00
3 coal hods	1 00
4 carpets	60 00
1 copying machine	8 00
8 desks	180 00
2 dust pans	50
2 horses	400 00
2 sets of harnesses	50 00
Amount brought forward	$1,262 00

Amount carried forward	$1,262 00
2 horse blankets	8 00
13 pairs of handcuffs	35 00
1 hat rack	50
2 halters	1 00
1 ice hatchet and tongs	1 00
20 lanterns	20 00
5 lounges	30 00
1 letter scale	75
8 mirrors	14 00
5 mats	5 00
3 maps	1 00
6 oil cans	1 50
1 police van	150 00
1 pair of runners	6 00
76 revolvers	532 00
Ropes and stakes	25 00
3 robes	15 00
1 rogues' gallery	150 00
2 straps and weights	1 00
6 slates	1 00
16 spittoons	4 00
1 sleigh	50 00
4 stretchers	6 00
3 saddles	15 00
1 safe	200 00
2 stoves	20 00
3 thermometers	75
Telephone line	300 00
30 tin dippers	3 00
12 towels	2 50
8 tables	24 00
3 umbrella stands	2 00
6 waste baskets	2 00
4 water coolers	4 00
4 water pails	1 00
1 wagon jack	1 00
1 wardrobe	10 00
2 wash bowls	75
1 wagon	30 00
Total	$2,935 75

Total cost of the department for the year	$86,308 25
Appropriation and estimated revenue	88,000 00

Expenditures.

Buttons	$50 00
Badges	6 00
Books	16 75
Billies	33 12
Amount brought forward	$105 87

Amount carried forward	$105 87
Boarding Horses,	564 00
Carriage hire	32 90
Cleaning Station No. 3	120 00
Clipping horse	3 00
Cambridge Gas-Light Co.	546 59
Directories for the department	12 50
Expressing	45
Medicines	1 55
Medical attendance	15 00
Mrs. Marshall, for straps	101 75
New harness	62 00
New sleigh	57 00
Printing	36 61
Photographs, for rogues' gallery	25 65
Police cloth, for department	341 10
Paid for horse	320 00
Policemen, services of	77,887 19
Repairs on wagons	77 52
Repairs on clocks	3 25
Repairs on furniture	5 72
Repairs on padded cell	17 00
Repairs on harnesses	3 70
Shoeing horses	43 90
Supplies for stations	280 39
Salary of Chief of Police	1,700 00
Salary of captains	3,744 00
Travelling expenses	85 80
Telegraphing	2 41
Telephone Company	111 40
Total	$86,308 25

Expenditures	$86,308 25
Receipts	5,962 99
Balance showing actual cost	80,345 26
Balance unexpended	1,691 75

The organization of the force consists of a chief, three captains, ten sergeants, and sixty-five patrolmen. One sergeant and fifteen patrolmen are on duty in the day time, including one patrolman who has charge of Station Five; two sergeants are detailed as inspectors. During the night time there are seven sergeants and fifty patrolmen on duty: one as a house sergeant at Station One, six as patrol sergeants, two in each police district, a sergeant with each relief, three patrolmen as house officers and forty-seven officers divided into two reliefs.

I would recommend the Police Signal System. I feel that with the Police Signal System we should have a very efficient police force and our city would be as well protected as any city in the commonwealth. With the introduction of the new system of telephone boxes, instantaneous communication is established between the stations, and every patrolman on his route in the city. The system is no longer an experiment, but an actual accomplished fact, and as its value for police purposes can hardly be overestimated, it is hoped that our city council will provide for its general use in the department.

During the past year there have been several changes in the department. The death of James W. Wright, a young and efficient officer, who died with typhoid pneumonia; Officer James F. Wilkinson resigned and Officer Michael J. Whalen was discharged. There have been four appointments to the force during the past year, all under the civil service rules, making an increase of three officers.

The matrons appointed in 1887 to take sole charge of all females arrested in the city have done their work well and faithfully.

In 1888 as in 1887 under the no-license law a determined effort has been made to suppress the illegal sale of intoxicating liquors. During the year we have procured search warrants and searched one hundred and sixty-one places, and have also prosecuted ninety-nine persons for violation of the liquor law. The difficulties attending the enforcement of the liquor law are such as never appear in any other criminal case; to obtain evidence in these cases is very difficult; good citizens who would assist an officer in any other matter, decline to make any disclosures in regard to the illegal sale of liquors. It is, therefore, obligatory on the officers to depend entirely on their own observations for evidence to convict a person of a violation of this law. Officers are very often satisfied in their own minds that illegal sales of liquor have been made, but the same evidence that satisfied them and other people would not satisfy a court or jury.

During the past year we have also seized, confiscated and turned over to the Chief of the Massachusetts District Police a quantity of liquors.

I would suggest to your Honor and City Council the advisability of taking some action in the matter of pensioning some of our old and faithful officers.

In submitting my report I desire to tender my thanks to his Honor Mayor Russell, and to you, gentlemen of the City Council, and especially to thank the gentlemen comprising the committee on Police; also his Honor Judge Orcutt; Mr. Walter W. Pike, City Clerk; City Solicitor Charles J. McIntire; District Attorney Wm. B. Stevens, and Assistant District Attorney Cooney for their counsel and friendly advice. To them I feel under great obligations, and also to the members of the force for the prompt and efficient manner in which they have discharged the duties of their office.

In closing I have simply to say that I have endeavored to discharge the duties of the office faithfully, economically and impartially. I have the honor to be, gentlemen,

Your obedient servant,

LOTHROP J. CLOYES,

Chief of Police.

REPORT

OF THE

PROBATION OFFICER.

CAMBRIDGE, December 1, 1888.

To His Honor the Mayor and the Board of Aldermen: —

GENTLEMEN: I hereby submit my fourth annual report as Probation Officer for the year ending November 30, 1888.

Whole number of cases investigated and results recorded	1,197
Number of persons on probation December 1, 1887	29
Number placed on probation since	107
Whole number in my care during the year	136

Nativity, Sex, etc.

Natives of Cambridge	42
" " other parts of the United States	51
" " Ireland	25
" " Nova Scotia	8
" " England	4
" " New Brunswick	3
" " Canada	2
" " West Indies	1
Number of males	125
" " females	11
" " adults	79
" " minors	57
Single persons	82
Married persons	54
Number of children dependent for their support on the married persons	145

Occupation.

Work at trades	34
Work in manufactories	15
Work in stores	4
Laborers	21
Housework	11

Drivers and teamsters	11
Engineer	1
Clerks	3
Railroad employés	3
Sailor	1
Agent	1
Attend school	21
Minors without employment	10

Nature of Offences.

Drunkenness	78
Breaking and entering	19
Assault and battery	15
Larceny	12
Non-support of family	5
Disturbing the peace	2
Common drunkard	1
Idle and disorderly person	1
Threatening to assault wife	1
Violation of city ordinance	1
Probation from the state reformatory	1

Results.

Placed on file by Court for good conduct	94
Did not improve and were defaulted or sentenced	11
Doubtful cases but showing some improvement	6
Number remaining on probation November 30	25
Number of applications for release from the house of correction investigated	3
Pardons recommended and granted	3

The number of probationers has been larger than in any former year, and it is gratifying to know that good results have followed in such a large number of cases.

Ninety-four persons have so conducted themselves as to satisfy the Court before which they were convicted of their honest purpose to turn from a life of crime upon which some of them were just entering, or to overcome the appetite for strong drink that was bringing disgrace and misery to themselves and families; and the cases against them have been placed on file.

Had fines or imprisonment been imposed would the results have been as good?

Many of these persons are natives of our good city of Cambridge, and nearly all are residents here, and the benefits must be manifest not only to themselves and their families, but to the community in which they live.

By referring to the above figures it will be seen that many of the probationers were minors.

Twenty-one of them were school-boys, and ten were minors with no employment.

The cases of breaking and entering were all boys under seventeen years of age, and several of them but ten years old. The responsibility for this state of things rests largely I believe upon parents.

The usual term of probation is three months, but this term is sometimes extended in doubtful cases.

Respectfully submitted,

FREDERICK W. HAGAR,

Probation Officer.

REPORT

OF THE

BOARD OF HEALTH.

In compliance with the public statutes creating Boards of Health and defining their duties, we have the honor to make our annual report for the year ending Dec. 31, 1888.

We respectfully call the attention of your honorable body to the following list of complaints and nuisances investigated during the year: —

Full, overflowing and offensive privy-vaults	796
Open, defective and leaky privy-vaults	358
Filthy and defective privy-houses	189
Offensive and defective water-closets	143
Swill and garbage thrown into privy-vaults	48
Offensive and obstructed sluice-vaults	53
Privies on or near line	19
No proper privy-vaults	18
Full and defective cesspools	118
Defective drainage, open and broken drains, etc.	473
No traps under sinks	108
Leaky and defective traps	87
Leakv and defective sinks and bowls	75
Filthy and dirty yards	152
Swill, garbage, ashes, etc., in cellars	67
Filthy stables and sheds	96
Manure in yards and on lots	94
Wet and damp cellars	133
Stagnant water on premises	128
Swine kept on premises	24
Miscellaneous	133
Total	3,312
Number of inspections made	2,678
Number of subsequent inspections	1,113

Number of notices issued and recorded		1,222
Number of second notices issued		30
Number of special notices issued		269
Number of verbal notices given		183
Copies of regulations of the board issued		321
Orders of the board served by constable		4
Complaints received and investigated		416
Complaints sustained	409	
Complaints not sustained	7	
Vaccinations and re-vaccinations		198
Rooms fumigated		91
Number of notices for treatment of contagious diseases, sent out		278
Number of visits to premises where contagious diseases occurred during the year		345

The list is nearly a thousand larger than last year. This great increase in the number of nuisances investigated as we stated last year is not because nuisances are becoming more frequent, but for the reason that notice is now taken of even the slightest sanitary defects. The largest item in this nuisance list is as usual, offensive privy vaults; as building goes on from year to year these offensive nuisances become more and more serious as such building in many instances brings these privies in close proximity to the doors and windows of dwellings.

The only way the Board now has of getting rid of one of these vaults is by proving them a nuisance and dangerous to the public health. This, owing to the reluctance of neighbors to give evidence against each other in these cases, it is often impossible to do, and so the offence continues. We believe that boards of health should be given full power in all cities of over 50,000 inhabitants to abolish privy-vaults whenever to their opinion such vaults become offensive. This power was given to the Boston board of health some three or four years ago; as such power can only come from the legislature we recommend that the city council take such steps as it may deem proper looking to the enactment of such a law. The other nuisances to which the board has given its attention were usually not of a serious character and most of these were discovered by the health officer and inspector; among these the one that has given the most serious annoyance and the one that has been a frequent source of complaint, is water standing on vacant land; as the past season has been a very wet one, a great many of the vacant lots, particularly in the flat portions of the city bordering on the river and marsh, have been much of the time covered with water. This has been particularly annoying to parties living in the vicinity of these lots by reason of dampness and in many cases water in their cellars. A number of notices have been issued to owners of such vacant lots to abate these nuisances; some of these have been readily complied with, while others have not; these latter have not been complained of in the courts, principally for the reason that the year has been a very wet one and most of the time water has stood upon lots that are usually dry. No such leniency will be shown in the future, as these wet lots can generally be drained at little cost, and the board deem it of great importance to keep the surface of the ground and the soil as dry as possible.

The Bridge Street sewer outlet still continues to pour out its stinking contents under Craigie's Bridge, constituting one of the worst nuisances in the state. As some of your honorable body is aware, an investigation was commenced last year to determine what estates in Cambridge or Somerville contributed the whole or chief part of the sewage causing the nuisance at this sewer outlet. For the details of that investigation we refer you to our report of last year. During the fall, thirty samples of sewage have been collected for analysis. These samples were taken as last year, ten of them from the sewer below where the drainage from Squire's enters, five of them from the sewer above where Squire's enters, and below where North enters, five of them from above North's, and five each from the drains of Squire and North, before they enter the sewer. The results of these analyses are published with this report; they fully confirm the results as shown by the analyses of last year, namely, the very large amount of organic matter that is being discharged into this sewer by these establishments.

The attention of both Squire and North, was called to the results of our investigation last year. So far as we are aware, neither of them have taken any steps, looking to the removal of this organic matter, or any part of it, coming from their works before it is allowed to enter the public sewer. Mr. Squire has however, during the last year built three grease and settling tanks, in addition to those he already had, but these seem to have little or no influence on the amount of filth discharged into the sewer. In addition to this sewer, draining a large part of Somerville, Cambridge has quite a number of others discharging their contents into the Charles River; considerable of the sediment of this mass of sewage must of necessity be deposited on the flats at each outgoing of the tide; a few times this summer the odor from this has been quite perceptible at places along the river, and once or twice has reached as far as Main street.

The fact that the new Avenue and Bridge go directly through these flats, makes the abatement of this nuisance of great importance to the City of Cambridge.

The State Board of Health to whom the matter of a general system of drainage of this side of the Charles River was referred, are to report to this present legislature, and as that body will undoubtedly act upon the matter this winter, this report will probably be published in book form, so that any one interested can have a copy for the asking.

This plan of a Metropolitan system of drainage providing for the sewage that is now poured into Charles River and Alewife Brook, if adopted, will be the most important matter that has ever been presented to the city goverment, both from a sanitary standpoint and as a matter of cost, and every member of the city council, as well as our citizens generally, should take especial pains to inform themselves as to its details.

In the pollution of Charles River and Alewife Brook, Somerville and Cambridge are perhaps the greatest sinners, but certainly the latter is the greater sufferer, and all of her citizens should, and we believe will, heartily endorse any plan looking to a purification of these streams, provided the plan is the best that can be devised under all the circumstances.

The new water supply from Stony Brook has been abundant, during the whole of the year and we believe of as good quality as could be obtained in this vicinity; so far as we know it has given general satisfaction to our citizens; but the City Council should not lose sight of the fact that the streams supplying this water run through a farming district, and one too, in which the population is constantly increasing, and that they cannot be assured that the water is not being contaminated except by the most careful policing at short intervals.

As a preliminary to such policing, we respectfully recommend that a map be made, showing these streams from the reservoir to the fountain head of all their branches, that all dwellings, manufactories, mills, etc., near such streams be designated thereon, and the direction in which the drainage flows from them, also, all other houses or buildings and the direction of their drains where the contents of such drains may under any probable combination of events find their way into any of these streams; also, that the general character of the land through which these streams flow be designated. We further recommend that if possible some arrangement be made with the town authorities through which the brooks run, or perhaps with the physicians of such towns and vicinity, to report to the city authorities any case of contagious disease that may occur in any house in the vicinity of Stony Brook, or any of its branches. The results that have sometimes come from the contamination of public water supplies by excretions from persons suffering from contagious disease were referred to in our report last year. The result of such contamination of our Cambridge water supply might be appalling; certainly ordinary prudence demands that every precaution be taken to prevent such a calamity. The cost of such policing and reports as are herein recommended will be small. The map could be prepared under the direction of the City Engineer and Health Officer at little expense.

Through the energetic management of the Water Board the sanitary condition of the shores and surroundings of Fresh Pond have continued to improve as in former years; but in defiance of all their efforts as well as those of this Board there is one standing menace to the comfort of the people living in this vicinity, as well as to those who visit the driveway around the pond, if not, to the purity of the water of the pond itself, and that is, the stinking hog-slaughtering establishments, near Concord Avenue.

These establishments at their best are not desirable near a public water supply, but when carried on in the careless and indifferent manner this one is, as to the escape of odors and general cleanliness of premises, they become an offensive nuisance.

A hearing was had last year by this Board as to the nuisance caused by the offensive odors coming from this slaughtering establishment; unfortunately only one neighbor apeared to testify against the establishment, and they were not prosecuted in the courts. They have however repeatedly been notified by the Board and some improvement has been made particularly as to the general cleanliness of the premises. These slaughtering establishments from the nature of the business must of necessity be the cause of more or less offensive odors, some of which are bound to escape in spite of every precaution; but owing to the indifference and carelessness of the manager of this establishment these odors have at times pervaded the whole neighborhood. If the notices and orders of this Board do not succeed in correcting the manner in which this business is carried on, this firm will be prosecuted in the courts whenever we can procure evidence on which we can reasonably expect conviction.

During the year the Health Officer has visited and examined the school-houses, more particularly in relation to their ventilation. Many of these houses have small and poorly arranged ventilators; in some of them neither the teachers or the janitors knew how to operate them, and some of them did not even know what they were for. In some of these school-houses the basements were untidy, and in a few cases filthy, from an accumulation of ashes, broken furniture, waste paper and rubbish generally. We respectfully call the attention of the City Council to the necessity of some better means of ventilation in nearly all our school-houses, and also for the removal of some of the older if not all of the sluice-vaults in the basements, and the substitution of some proper form of water-closets.

The record of the deaths that have occurred in the city the past year and their causes are published with this report as well as the number of cases of contagious diseases reported. To these we respectfully call your attention.

The whole number of deaths is 1390, 65 more than last year. This increase is fully accounted for by the increase in population. The number of cases of contagious diseases is the same as last year, 536. One hundred and sixty-five of these were cases of typhoid fever, 40 more than last year. This increase in the number of cases of this disease was not alone in Cambridge, but was general throughout New England.

While the number of cases of contagious diseases reported is the same as last year, the number of deaths from these are largely increased, being 77 last year against 109 this year.

The history of all these contagions has been, that they are often much more fatal at some times than others, and that fact no doubt accounts for this increased fatality.

D. H. THURSTON, H. P. WALCOTT, WM. H. WHITNEY,	*Board of Health.*

OFFICE OF THE BOARD OF HEALTH, CITY HALL,
CAMBRIDGE, December 28, 1888.

To the Honorable City Council: —

GENTLEMEN: The following is the annual statement of the expenditures of this board, during the financial year ending November 30, 1888.

The appropriation for the Health Department was . $3,500 00

The expenses were as follows: —

Advertising regulations of the Board	$9 91	
Boxes for miscellaneous files of the Board	9 00	
Burying animals	50 25	
Car tickets	40 00	
Cow-pox points for vaccination	27 63	
Dating stamp	5 40	
Directory	2 50	
Disinfectants	37 60	
Expenses, Bridge Sewer investigation, teaming and labor	23 73	
Expenses of Health Officer, attendance at American Public Health Association, at Milwaukee, Wis.	55 00	
Extra services issuing burial permits under statute of 1888	50 00	
Postal cards and printing	12 50	
Postage stamps	16 00	
Printing	88 40	
Stationery	33 44	
Salary Clerk of Board	150 00	
Salary Health Officer	1,500 00	
Salary Sanitary Inspector	900 00	
Total expenditures		$3,011 36
Balance unexpended		$488 64

By direction of the Board of Health,

JOHN McDUFFIE,
Clerk.

Analysis of Sewage from Bridge Street Sewer, etc., 1888. Parts in 100,000.

Date.	Where Collected.	Total Solids.	Residue.	Loss on ignition.	Free Ammonia.	Alb. Ammonia.	Total Ammonia.	Remarks.
SAMPLE NO. 1.								
July 31	Taken from first man-hole from corner Bridge and Fourth Streets, going toward Somerville. (Samples taken from this man-hole last year marked No. 3.)	496.00	194.00	302.00	013.20	026.20	039.40	After keeping one week, Free Ammonia . . . 033 60 Alb. Ammonia . . . 007.90 Total . . . . 041.50 These samples were taken at low tide.
August 16		372.00	228.00	144.00	005.90	010.80	016.70	
October 16		352.00	196.00	156.00	003.80	007 30	011.10	
October 31		142.00	062.00	080.00	005.10	004.60	009.70	
November 12		308 00	178.00	130.00	003.20	004.40	007.60	
SAMPLE NO. 2								
July 31	Taken from second man-hole from corner Bridge and Fourth Streets, and just below where Messrs. Squire & Co.'s new drain enters the sewer. (Samples taken from this man-hole last year marked No. 3x.)	240.00	068.00	172.00	009 60	010.30	019.90	Samples taken at low tide.
August 16		324.00	202.00	122.00	008.60	009.60	018.20	
October 16		204.00	118.00	086.00	003.80	004.80	008.60	
October 31		218.00	102.00	116.00	006.80	007.80	014.60	
November 12		168.00	092.00	076.00	002.50	004.10	006.60	
SAMPLE NO. 3.								
July 31	Taken from third man-hole from corner Bridge and Fourth Streets, close to railroad crossing (above). Above Squire's drain, and just below where North & Co.'s drain enters the sewer.	248.00	108.00	140.00	014.20	011.60	025.80	No samples were collected from this man-hole last year. Samples taken at low tide.
August 16		152 00	066.00	086.00	003.60	002.20	005.80	
October 16		172.00	128.00	044.00	002.30	001.80	004.10	
October 31		234.00	126.00	108.00	007.80	006.20	014.00	
November 12		142.00	074.00	068.00	003.10	003.30	006.40	
SAMPLE NO. 4.								
July 31	Taken from fourth man-hole from corner Bridge and Fourth Streets, above where North & Co.'s drain enters the sewer.	106.00	038.00	068.00	006 30	001.80	008 10	Samples taken at low tide.
August 16		088.00	038.00	050.00	003.20	002.10	005.30	
October 16		052.00	018 00	034.00	001.60	001.30	002.90	
October 31		124.00	058.00	066.00	006.40	003.70	010.10	
November 12		088.00	032.00	056.00	002.10	001.80	003.90	
SAMPLE NO. 5.								
July 31	Taken from three man-holes side of North & Co.'s establishment. (The first three.)	312.00	126.00	186.00	025.20	008.20	033.40	No thick deposits of grease found in man-holes this year.
August 16		282.00	112.00	170.00	017.60	004.60	022.20	
October 16		2032 00	1778.00	254.00	006.80	010.80	017.60	
October 31		558.00	334.00	224.00	016.40	010 40	026.80	
November 12		1132.00	482.00	650.00	033.20	051.60	084.80	
SAMPLE NO. 6.								
July 31	Taken from man-hole in Squire & Co.'s yard, back of hog house.	1032.00	512.00	520.00	044.80	017.60	062.40	Bloody and offensive.
August 16		372.00	242.00	130.00	023.20	007.40	030.60	These samples not so bloody as others.
October 16		684.00	488.00	196.00	011.60	010.40	022.00	
October 31		1192.00	538.00	654.00	016.40	022.40	038.80	
November 12	New drain.	1378.00	386.00	992.00	029.20	076.80	106.00	Very bloody and offensive.

Totals of Samples, 1888.

Where Collected.	Nos.	Number of Samples.	Total Solids.	Free Ammonia.	Alb. Ammonia.	Total Ammonia.	Remarks.
First man-hole from Fourth Street........	1	Five.	1670.00	031.20	053.30	084.50	This sample numbered 3 in last year's report.
Second man-hole from Fourth Street......	2	Five.	1154.00	031.30	036.60	067.90	This sample numbered 3x in last year's report.
Third man-hole from Fourth Street........	3	Five.	948.00	031.00	025.10	056.10	No sample taken from this man-hole last year.
Fourth man-hole from Fourth Street.......	4	Five.	458.00	019.60	010.70	030.30	Same number as in last year's report.
North & Co.'s Factory......................	5	Five.	4316.00	099.20	085.60	184.80	Same number as in last year's report.
Squire & Co.'s Factory......................	6	Five.	4658.00	125.20	134.60	259.80	Same number as in last year's report.

APPENDIX.

Causes of Death in 1888.

ARRANGED ALPHABETICALLY.

DISEASES, &c.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Abscess	1	....	....	....	....	....	....	....	1	....	....	1	3
Accidents	1	2	....	1	2	1	1	1	1	...	1	....	11
Addison's Disease	....	....	1	..	....	....	...	....	....	....	....	....	1
Alcoholism	....	....	....	2	...	....	....	....	....	....	....	....	2
Anæmia	2	....	....	....	....	...	....	....	....	....	....	1	3
Aneurism	1	....	....	....	....	....	....	....	....	....	....	....	1
Apoplexy	6	1	3	5	3	....	6	1	4	5	2	4	40
Atrophy and Debility	1	3	1	....	4	....	....	1	3	2	....	....	15
Brain Diseases	1	2	....	1	....	....	....	2	3	1	2	....	12
Bright's Disease	....	....	5	2	....	1	1	1	1	1	1	1	14
Bronchitis	5	6	3	8	6	4	3	1	2	2	4	6	50
Burns and Scalds	....	....	....	1	....	....	....	...	1	....	....	3	5
Cancer	3	3	2	6	2	3	3	4	5	3	1	6	41
Cerebro-Spinal Meningitis	1	....	...	1	....	....	....	....	1	...	....	....	3
Childbirth	....	....	....	....	....	....	1	....	....	1	....	....	2
Cholera Infantum	1	....	....	....	....	....	31	57	40	5	2	....	136
Cholera Morbus	....	....	....	....	...	...	....	....	2	....	....	....	2
Convulsions	1	4	1	7	2	2	3	4	3	3	3	3	36
Croup	1	2	4	2	1	....	....	1	....	...	....	1	12
Cyanosis	....	....	....	....	....	....	....	....	....	....	1	2	3
Cystitis	1	....	2	1	....	....	1	....	1	....	....	....	6
Diabetis	....	....	....	1	1	....	2	....	....	1	....	....	5
Diarrhœa	....	....	....	1	....	2	2	1	....	1	1	1	9
Diphtheria	8	2	2	7	10	4	5	8	2	4	4	3	59
Dropsy	....	1	....	....	....	....	....	1	....	....	1	....	3
Drowning	....	....	....	....	....	2	....	2	....	....	....	....	4
Dysentery	....	....	....	....	1	....	2	1	1	....	....	....	5
Enteritis	....	....	2	....	....	..	....	....	....	....	....	....	2

Causes of Death in 1888 — *Continued.*

DISEASES, &c.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Epilepsy	...	....	1	....	....	....	...	....	....	....	....	....	1
Erysipelas	1	2	....	....	....	1	....	....	....	...	....	....	4
Fever, Scarlet	9	2	5	....	2	2	1	....	....	1	....	....	22
Fever, Typhoid	....	3	....	....	1	....	....	6	7	9	1	....	27
Fractures	....	....	....	2	....	....	....	....	....	....	....	....	2
Gastritis	2	1	....	....	....	1	1	2	....	1	....	....	8
Heart Disease	5	7	6	10	3	8	5	5	6	4	4	5	68
Hernia	1	1	....	1	....	....	1	....	....	....	....	1	5
Hodgkin's Disease	....	....	....	....	....	....	....	....	....	....	1	....	1
Hydrocephalus	1	2	1	1	1	1	....	....	1	2	....	....	10
Ileus	....	....	....	1	....	....	....	...	....	....	....	....	1
Insanity	1	....	....	....	....	1	1	....	....	....	....	....	3
Judicial Hanging	1	....	....	....	....	....	....	....	....	....	....	....	1
Kidney Disease	1	....	....	....	....	1	....	....	....	....	1	1	4
Laryngitis.	....	....	....	1	....	....	....	....	....	1	....	....	2
Liver Disease	....	....	1	3	....	....	2	1	1	2	2	3	15
Lung Disease	1	....	....	1	....	2	1	....	....	....	....	....	5
Measles	....	....	....	....	....	....	1	....	....	....	....	1	2
Meningitis	3	8	6	6	2	4	8	3	8	3	2	4	57
Metria	1	....	2	1	1	....	....	....	....	....	1	....	6
Nephritis	1	....	....	1	2	....	2	....	2	1	1	....	10
Occlusion of Intestines	1	....	2	1	..	1	....	1	....	...	....	....	6
Other Malformations	...	....	...	....	....	....	....	....	....	....	1	....	1
Old Age	3	9	5	2	2	2	1	4	3	1	2	3	37
Paralysis	7	...	4	1	1	1	3	2	4	1	4	1	29
Peritonitis	1	2	1	1	....	1	....	....	2	....	1	3	12
Phlebitis	....	....	....	....	....	....	....	....	1	...	....	....	1
Phthisis	17	17	14	20	13	14	8	9	9	23	13	13	170
Pleurisy	....	....	....	1	....	....	....	....	....	....	....	...	1
Pneumonia	18	16	10	11	6	3	6	....	7	8	12	11	108
Poison	....	....	1	....	1	....	....	....	....	1	....	....	3
Premature Birth and Infantile Debility	7	8	12	5	7	7	6	9	12	10	5	5	93
Pulmonary Embolism	....	1	....	....	....	...	....	....	....	....	1	....	2

Causes of Death in 1888—*Continued.*

DISEASES, &C.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Purpura Hemorrhagica	....	....	....	...	....	....	...	....	....	....	....	1	1
Pyemia	....	....	1	....	....	1	...	....	1	....	....	1	4
Rheumatism	....	1	....	2	....	....	....	....	...	1	...	1	5
Scrofula	....	....	....	....	....	....	....	....	2	....	....	....	2
Septicæmia	1	....	....	....	1	....	1	....	....	....	....	....	3
Spina Bifida	....	....	1	....	....	....	1	...	....	2	....	....	4
Spinal Disease	1	....	....	1	....	....	....	....	....	....	....	....	2
Stillborn	10	9	6	13	11	8	3	2	8	2	9	13	94
Stomach Disease	....	....	....	....	1	....	1	....	....	....	....	....	2
Stricture of Œsophagus	....	....	....	....	...	....	...	....	....	1	....	....	1
Suicide	....	2	1	2	....	....	....	....	....	....	1	1	7
Sunstroke	....	....	....	....	....	....	....	1	....	....	....	....	1
Surgical Operation	....	....	....	....	....	....	....	....	...	....	....	1	1
Syphillis	....	....	....	....	....	....	1	....	1	....	....	....	2
Tabes Mesenterica	....	....	....	....	....	....	1	....	....	1	....	....	2
Teething	....	....	....	....	...	...	....	....	....	1	....	....	1
Ulceration of Intestines	....	....	....	....	....	....	....	....	....	....	....	1	1
Umbilical Hemorrhage	....	....	....	....	....	1	....	1	...	....	....	....	2
Unknown	2	4	1	3	5	3	3	2	2	3	1	2	31
Whooping Cough	1	1	2	....	....	....	4	3	8	1	1	1	22
Totals	131	122	109	137	92	82	123	137	156	109	87	105	1390

Cases of Scarlet Fever, Diphtheria and Typhoid Fever reported to the Board of Health for the Year 1888.

NAME OF DISEASE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Scarlet Fever	38	19	16	15	14	16	5	1	4	6	3	12	149
Diphtheria	28	16	17	27	28	15	9	19	7	21	12	23	222
Typhoid Fever	2	4	2	1	1	3	4	30	56	28	18	16	165
Totals	68	39	35	43	43	34	18	50	67	55	33	51	536

REPORT

OF THE

SUPERINTENDENT OF LAMPS.

To the Honorable the City Council:—

THE undersigned respectfully submits the annual report of the Lamp Department.

Amount appropriated		$44,000 00
Estimated revenue		250 00
		$44,250 00
Amount expended as follows:—		
For Electric lighting	$16,460 61	
Gas	14,298 42	
Pay-roll	7,881 77	
Oil, matches, etc.	588 12	
Piping and fitting posts	259 28	
Repairs on posts and lanterns	518 91	
Granite curbing to electric poles	24 11	
Posts and lanterns	96 00	
Glass, putty, etc.	278 22	
Cans, ladders, etc.	68 67	
Carriage-hire	198 00	
Repairs of electric lights	13 00	
Founts	19 58	
Sundries	31 47	
Superintendent	650 00	
		$41,386 16
Amount unexpended		2,863 84
		$44,250 00

The amount received for broken posts, lanterns, glass, etc., $113 19, if deducted from amount of expenditures, would leave the actual cost of the department $41,272.97.

The cost per lamp for all expenses of the department was for the gas lamps $29.31 yearly, and for the oil lamps $17.93.

The total number of lamps now lighted by the city is 907 gas and oil and 102 electric lamps distributed as follows:—

	Gas.	Kerosene.	
District No. 1	131	33	
" " 2	116	41	
" " 3	129	30	
" " 4	168	13	
" " 5	117	48	
" " 6	49	32	
	710	197	907

ELECTRIC LAMPS.

26	lamps	from West Boston bridge to Harvard Square.
1	"	in Brattle Square.
1	"	" Brattle Street.
1	"	" Church Street.
1	"	" Waterhouse Street.
2	"	" Garden Street.
1	"	" Boylston Street.
20	"	" North Avenue.
26	"	" Cambridge Street.
3	"	" Bridge Street.
12	"	" Broadway.
6	"	" River Street.
2	"	" Western Avenue.
102		

49 lamps have been discontinued, four of which have been relighted. 23 lamps have been set, 13 gas and 10 kerosene; of this number the city has furnished 18 and the petitioners 5.

The lamps have been lighted on 344 nights and the aggregate number of hours burned was 2,377,022$\frac{3}{8}$ and consuming 9,508,089$\frac{1}{2}$ feet of gas.

The longest number of hours of burning in one night was 13$\frac{1}{2}$, and the shortest 1$\frac{3}{4}$, averaging 8.09 hours.

The cost of each, covering all expenses, was for gas lamps, 8 cents per night, and kerosene, 5 cents.

The cost per lamp for electric lighting is $180.00 per year. The total expenditures for electric lighting during the year past was $16,714.39.

The city has entered into a contract with the Cambridge Electric Light Co., whereby said company agrees to furnish arc lights of not less than two thousand candle power at a cost of $15.00 per month for each lamp. Said contract is for three years dating from April 1, 1888.

Six hundred lanterns have been taken from the several routes and whenever it was found necessary have been repaired, while all of this number have been painted two coats inside and one coat on the outside. This has added considerably to the cost of maintenance, but it was thought advisable to do so as a matter of economy from the fact that a large number of the lanterns if allowed to go much longer without being repaired would become useless.

It has been the custom for a number of years not to light the street lamps on the nights of and near the full of the moon. A great many complaints have been made against such a custom; and, although great care has been exercised in the matter of selecting such nights, yet there have been quite a number of times, when the reports of the weather bureau and all indications pointed to fair weather, that shortly after putting out the lights, it would cloud up and be very dark and on one or two occasions it has stormed. As there are many streets on which the buildings are so tall as to interfere with lighting such streets by the moon, and a great many on which the trees are so thick as to exclude nearly if not all the light from such source; it is earnestly recommended that the lamps be lighted on each and every night during the year.

Respectfully submitted,

B. OTIS DANFORTH,
Superintendent of Lamps.

REPORT

OF THE

SEALER OF WEIGHTS AND MEASURES.

CAMBRIDGE, November 30, 1888.

To the Honorable the City Council: —

THE undersigned respectfully submits the report of the department of Weights and Measures.

1888.

	Sealed.	Adj'st'd.	Condemned.
Scales,	1022	207	13
Weights,	3564	411	2
Dry Measures,	97	6	2
Liquid Measures,	273	16	10
Yard Sticks,	11	0	0
Totals,	4967	640	27

Respectfully submitted,

B. OTIS DANFORTH,

Sealer of Weights and Measures.

REPORT

OF THE

INSPECTOR OF MILK AND VINEGAR.

To the Honorable the Mayor and Board of Aldermen of the City of Cambridge :—

GENTLEMEN: In accordance with the City Ordinance I submit my annual report for the year 1888.

The object of this office is to prevent the sale of adulterated milk or vinegar or of that which is not of good, standard quality, and the means used to obtain this end are as follows: everyone selling milk is required to take out a license permitting such sales and by this means the inspector can form some idea of how many persons are engaged in the business; unfortunately no such provision has been made in regard to the sale of vinegar. Then as large a number of samples as possible are collected and analyzed during the year, and all persons found selling milk or vinegar which has been adulterated or is of poor quality, are warned that the sale of such articles renders them liable to prosecution, and if from the analysis of samples subsequently procured from them no improvement is found, a complaint is made out and the case is taken into court.

Licenses are also issued to all persons selling oleomargarine or imitation butter, who may apply for them, but as at present no samples of butter are collected it is impossible to say how far the law regulating its sale is complied with, and I would respectfully suggest that during the coming year some provision should be made for the systematic inspection of this article of food.

The number of milk licenses issued during the year was 226, the number of butterine licenses 14, and from the sale of these licenses there has been collected the sum of $120.00, which has been paid to the city treasurer. The amount expended in the purchase of samples of milk and vinegar for analysis was $59.85, and for chemicals, etc., $10.50

The number of samples of milk collected and analyzed during the year was 1,576, of which number 1,402 samples conformed to the legal requirements of milk of good standard quality, while 174 samples were found not to so conform. Warnings were sent to the persons from whom these 174 samples were procured that they were selling milk not of good standard quality and that they were liable to prosecution, and five persons were prosecuted.

The number of samples of vinegar collected and analyzed during the year was 79, of which number 66 were sold as cider-vinegar and 13 as white wine vinegar. Of the 66 samples of cider-vinegar, 55 were found to conform to the legal standard for cider-vinegar while 11 did not so conform. Of the 13 samples of white wine vinegar all were found to be of standard quality. Warnings were sent to the persons from whom the poor samples were procured that they were liable to prosecution. No cases were taken into court. The following table shows the comparative results attained in the last two years:

	1887.		1888.	
	Milk.	Vinegar.	Milk.	Vinegar.
Number of samples collected	1,222	94	1,576	79
Number of good samples	960	78	1,402	68
Number of poor samples	262	16	174	11

Respectfully submitted,

FRANK A. DUNBAR, M. D.,
Inspector of Milk and Vinegar.

CAMBRIDGE, December 1, 1888.

REPORT

OF THE

SCHOOL COMMITTEE FOR 1888.

PREPARED BY THE SUPERINTENDENT OF SCHOOLS.

IN SCHOOL COMMITTEE, Dec. 20, 1888.

Ordered, That the Superintendent prepare the annual report and present it to this Board for approval.

SANFORD B. HUBBARD,
Secretary.

IN compliance with the above order the Superintendent herewith submits his fourteenth annual report, as the report of the School Committee for the year ending Dec. 31, 1888.

SUMMARY OF STATISTICS.

I. — POPULATION.

Population of Cambridge by the State census for 1885	59,660
Estimated population of Cambridge	65,000
Number of children in the city between five and fifteen years of age, May 1, 1888, as reported by the Truant-Officers	11,727

II. — SCHOOLS.

1 Latin School, with eight rooms.
1 English High School, with twelve rooms.
8 Grammar Schools, with one hundred ten rooms.
23 Primary Schools, with one hundred two rooms.
2 Evening Drawing Schools, with two rooms.
1 Evening High School, with three rooms.
2 Evening Schools, with two rooms.

Whole number of Day Schools	33
Whole number of separate rooms	232

III. — SCHOOL HOUSES.

For the Latin School	1
For the English High School	1
For the Grammar Schools	8
For both Grammar and Primary Schools	7
For the Primary Schools	17

IV. — TEACHERS.

Number of teachers in Latin School	10
Male teachers, 3; female teachers, 7.	
Number of teachers in English High School	12
Male teachers, 3; female teachers, 9.	
Number of teachers in Grammar Schools	115
Male teachers, 11; female teachers, 104.	
Number of teachers in Primary Schools	102
Number of teachers in Evening Drawing Schools, 1887–88	7
Average number of teachers in Evening Schools, 1887–88	15
Whole number of teachers* in Day Schools, including the teacher of music, the teacher of drawing, and the secretary and librarian of the High Schools	241
Number of teachers who have attended Normal Schools	175
Number of teachers who have graduated from Normal Schools	155

V. — PUPILS.

Attendance at all the Day Schools, 1884 to 1888.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1884	9,982	8,414	7,763	92.2
1885	10,213	8,650	7,915	91.5
1886	11,012	9,246	8,530	92.2
1887	11,157	9,429	8,672	92.0
1888	11,496	9,756	8,964	91.9

Attendance at the High Schools, 1884 to 1888.

L. stands for Latin School, E. for English High School.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1885	499	462	434	94.0
1886	561	490	467	95.3
1887	L. 196 E. 351 547	L. 181 E. 318 499	L. 175 E. 302 477	L. 96.5 E. 95.1 95.6
1888	L. 247 E. 343 590	L. 228 E. 304 532	L. 217 E. 290 507	L. 95.1 E. 95.3 95.2

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* Temporary assistants and members of the training class are counted as seven teachers; the sum of their salaries being equal to the amount paid that number of regular teachers.

Attendance at the Grammar Schools, 1884 to 1888.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1884	4,363	3,848	3,593	93 3
1885	4,562	4,119	3,816	92.6
1886	5,121	4,440	4,152	93.5
1887	5,334	4,628	4,317	93.3
1888	5,421	4,760	4,427	93.0

Attendance at the Primary Schools, 1884 to 1888.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1884	5,167	4,168	3,798	90.9
1885	5,152	4,069	3,664	90.0
1886	5,330	4,316	3,912	90.6
1887	5,276	4,301	3,877	90.1
1888	5,485	4,465	4,031	90.3

Number of Pupils Graduated from, and Admitted to, the High Schools and the Grammar Schools, 1885 to 1888.

L. stands for Latin School, E. for English High School.

Year.	Graduated from High Schools.	Admitted to High Schools.	Graduated from Grammar Schools.	Admitted to Grammar Schools.
1885	72	239	303	1,103
1886	61	198	273	1,165
1887	L. 12 E. 49 61	L. 106 E. 145 251	319	1,123
1888	L. 22 E. 42 64	L. 69 E. 210 279	361	1,222

Number of Pupils belonging to the Evening Schools, with the Average Attendance, 1887-88.

Number of Pupils . . . 356 | Average Attendance . . 149

Number of Pupils belonging to the Evening Drawing Schools, with the Average Attendance, 1884 to 1888.

1884.	1885.	1886.	1887.	1888.
212	223	223	234	216
104	110	106	107	101

Number of Pupils over Fifteen Years of Age belonging to the Day Schools on the First of May, 1884 to 1888.

1884.	1885.	1886.	1887.	1888.
668	695	739	836	917

Number of Pupils in the Private Schools in Cambridge, including the Parochial School, 1884 to 1888.

1884.	1885.	1886.	1887.	1888.
1,869	1,865	1,858	1,651	1,785

Table showing the Number in each Class in the Latin School, December, 1888.

Class.	Boys.	Girls.	Total.	Per cent.
First	22	14	36	.156
Second	19	11	30	.130
Third	31	23	54	.233
Fourth	27	26	53	.230
Fifth	35	23	58	.251
Total	134	97	231	

Table showing the Number in each Class in the English High School, December, 1888.

Class.	Boys.	Girls.	Total.	Per cent.
First	19	40	59	.163
Second	14	35	49	.135
Third	40	43	83	.228
Fourth	83	89	172	.474
Total	156	207	363	

Table showing the Number in each Class in the Grammar Schools, December, 1888.

Class.	Boys.	Girls.	Total.	Per cent.
First	182	270	452	.088
Second	275	366	641	.125
Third	399	435	834	.162
Fourth	490	509	999	.195
Fifth	511	522	1,033	.201
Sixth	558	618	1,176	.229
Total	2,415	2,720	5,135	

Table showing the Number in each Class in the Primary Schools, December, 1888.

Class.	Boys.	Girls.	Total.	Per cent.
First	638	618	1,256	.265
Second	670	643	1,313	.278
Third	1,145	1,019	2,164	.457
Total	2,453	2,280	4,733	

Summary of the School Census, as taken by the Truant Officers, May, 1888.

[The Statutes make it the duty of the School Committee annually to ascertain the names and ages of all persons belonging to their respective towns and cities on the first day of May, between the ages of five and fifteen years.]

Number of children in the city five years old or more, but less than fifteen	11,727
Number in Public Schools five years old or more, but less than fifteen	9,393
Number in Private Schools five years old or more, but less than fifteen	1,370
Number not attending school five years old or more, but less than eight	548
Number not attending school eight years old or more, but less than fourteen	209
Number not attending school fourteen years old or more, but less than fifteen	207
Whole number not attending school five years old or more, but less than fifteen	964
Number in the city five years old or more, but less than six	1,005
Number in the city eight years old or more, but less than fourteen	7,252

VI.—FINANCES.

[For the financial year ending December 1, 1888.]

Instruction in the Day Schools	$175,773 80
Free text-books and supplies	10,936 86
Incidental expenses	604 31
Evening Drawing Schools	1,403 07
Evening Schools	848 50
Industrial School	411 59
Care and repairs of School-houses	36,063 73
Land for the Peabody School-house	6,825 00
Expended on the Peabody School-house	5,303 74
Expended on the Putnam School-house	10,454 74
Plumbing in the Webster School-house	2,029 87
Expense in connection with the new High School-house	100 00
Total expenditures for all school purposes	$250,755 21

Deducting receipts from the Hopkins Fund ($914.11) and for tuition of non-resident pupils ($119.00), actual cost of the schools to the city	$249,722 10
Assessed value of real and personal estate, May, 1888	62,450,040 00
Ratio of expenses for school purposes to the valuation of 1888	.0039

Cost of Instruction in the Day Schools, 1876 to 1888.

[Salaries of teachers, superintendent, agent, and truant-officers.]

Year.	Whole Cost.	Average Number of Pupils.	Cost per Pupil.
1876	$164,818 00	7,066	$23 32
1877	151,946 65	7,139	21 28
1878	136,491 20	7,028	19 42
1879	132,570 49	6,957	19 05
1880	130,371 75	7,175	18 17
1881	132,501 10	7,434	17 82
1882	137,328 55	7,898	17 38
1883	144,457 60	8,194	17 63
1884	152,290 62	8,414	18 09
1885	158,640 13	8,650	18 33
1886	165,277 42	9,218	17 92
1887	172,135 06	9,429	18 25
1888	175,773 80	9,756	18 02

Cost of the Day Schools, 1876 to 1888.

[The expenditures for new school-houses are not included.]

Year.	Whole Cost.	Average Number of Pupils.	Cost per Pupil.
1876	$200,894 09	7,066	$28 43
1877	180,974 36	7,139	25 35
1878	162,437 77	7,028	23 11
1879	158,196 21	6,957	22 73
1880	153,967 56	7,175	21 45
1881	158,282 84	7,434	21 29
1882	166,230 52	7,898	21 04
1883	177,149 93	8,194	21 62
1884	203,234 56	8,414	24 15
1885	206,806 09	8,650	23 90
1886	207,536 46	9,218	22 51
1887	222,679 19	9,429	23 61
1888	225,408 57	9,756	23 10

Statistics taken from the Fifty-second Annual Report of the Secretary of the State Board of Education.

Number of cities and towns; cities,* 25; towns, 326	351
Number of public schools	6,918
Number of pupils of all ages in the public schools during the year	358,000
Number of persons over fifteen years of age attending the public schools	29,543
Per cent of attendance based upon the average membership	90
Number of persons employed as teachers in the public schools during the year: men, 1,010; women, 8,887; total	9,897
Number of teachers who have graduated from Normal Schools	2,677
Average number of months the public schools have been kept for the entire year	8.9
Number of High Schools	230
Number of teachers in High Schools	737
Number of pupils in High Schools	22,785
Amount expended upon the public schools, exclusive of the expense of school buildings	$5,934,198 59
Cost of new school-houses, permanent improvements, and ordinary repairs	1,153,007 83
Entire expenditure for public school purposes	7,087,206 42

Special Institutions.

The State has provided for the care and instruction of the deaf children at the American Asylum in Hartford, the Clark Institution in Northampton, and the Horace Mann School in Boston. A special appropriation was made this year to the New England Industrial School for deaf mutes in Beverly. As in other years, provision has been made for the blind in the Perkins Institute in South Boston, and for the feeble-minded in the School for Feeble-Minded in South Boston.

The number of Massachusetts pupils, January 1, 1889, in the American Asylum was 51; in the Clark Institute, 74; in the Horace Mann School, 72; in the Perkins Institute, October 1, 1888, 120; and in the School for Feeble-Minded, September 30, 1888, 160.

The sums expended for these purposes during the year are: for the deaf, $28,838.58; for the blind, $30,000.00; for the feeble-minded, $25,000.00.

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* Including Quincy and Woburn.

A graduated Table in which the Cities in the State are Numerically Arranged according to the Percentage of their Taxable Property Appropriated to the Support of Public Schools for the year 1887–88.

For 1887–88, by the State Valuation of 1887.	CITIES.	Percentage of Valuation appropriated to Public Schools—equivalent to mills and hundredths of mills.	For 1887–88, by the State Valuation of 1887.	CITIES.	Percentage of Valuation appropriated to Public Schools—equivalent to mills and hundredths of mills.
1	Waltham	$.004–38	14	Newton	$.003–16
2	Quincy	.004–09	15	Cambridge	.003–14
3	Gloucester	.004–01	16	Fall River	.003–06
4	Haverhill	.003–65	17	Northampton	.003–05
5	Woburn	.003–65	18	Taunton	.003–03
6	Somerville	.003–44	19	Salem	.002–96
7	Fitchburg	.003–35	20	Lowell	.002–88
8	Worcester	.003–31	21	New Bedford	.002–70
9	Lynn	.003–29	22	Lawrence	.002–68
10	Malden	.003–28	23	Springfield	.002–66
11	Chelsea	.003–25	24	Newburyport	.002–38
12	Holyoke	.003–18	25	Boston	.001–95
13	Brockton	.003–17			

Towns and Cities of Middlesex County.

For 1887–88, by the State Valuation of 1887.	TOWNS AND CITIES.	Percentage of Valuation appropriated to Public Schools—equivalent to mills and hundredths of mills.	For 1887–88, by the State Valuation of 1887.	TOWNS AND CITIES.	Percentage of Valuation appropriated to Public Schools—equivalent to mills and hundredths of mills.
1	Marlborough	$.005–46	28	Acton	$.003–34
2	Waltham	.004–38	29	Shirley	.003–29
3	Stoneham	.004–33	30	Malden	.003–28
4	Natick	.004–16	31	Sherborn	.003–28
5	Wakefield	.004–13	32	Watertown	.003–21
6	Ashby	.004–08	33	Newton	.003–16
7	Hudson	.004–06	34	Cambridge	.003–14
8	Arlington	.003–89	35	Littleton	.003–09
9	Westford	.003–79	36	Wilmington	.003–09
10	North Reading	.003–77	37	Lexington	.003–08
11	Concord	.003–75	38	Bedford	.002–94
12	Hopkinton	.003–72	39	Everett	.002–93
13	Ashland	.003–66	40	Pepperell	.002–90
14	Reading	.003–66	41	Lowell	.002–88
15	Holliston	.003–65	42	Dracut	.002–78
16	Woburn	.003–65	43	Carlisle	.002–72
17	Ayer	.003–62	44	Stow	.002–66
18	Medford	.003–56	45	Dunstable	.002–65
19	Tyngsboro'	.003–55	46	Maynard	.002–59
20	Winchester	.003–47	47	Weston	.002–58
21	Chelmsford	.003–45	48	Belmont	.002–52
22	Somerville	.003–44	49	Burlington	.002–34
23	Framingham	.003–42	50	Billerica	.002–28
24	Boxborough	.003–41	51	Tewksbury	.002–25
25	Melrose	.003–41	52	Sudbury	.002–05
26	Townsend	.003–41	53	Groton	.001–87
27	Wayland	.003–37	54	Lincoln	.001–50

TABULAR VIEW

OF THE

PUBLIC SCHOOLS OF CAMBRIDGE.

JANUARY 1, 1889.

Prepared by the Secretary of the School Committee.

Names of Schools.	Teachers.	Salaries.	No. of Scholars Jan. 1, 1889.
Latin School.	William F. Bradbury	$3,000	231
	Theodore P. Adams	2,000	
	Charles W. Parmenter	1,250	
	Helen M. Albee	950	
	Charlotte C. Barrell	950	
	Marion Bradbury	875	
	Caroline Drew	300	
	Margarette M. Leighton	950	
	Jennie S. Spring	950	
	Mary C. Warren	950	
English High.	Frank A. Hill	3,000	363
	Edwin L. Sargent	2,000	
	Charles F. Warner	1,500	
	Emma F. Munroe	1,150	
	Clara A. Armes	950	
	Carrie Close	875	
	Louisa P. Parker	950	
	Caroline A. Sawyer	950	
	Emma A. Scudder	950	
	Martha R. Smith	875	
	Maria E. Spare	950	
	Delia Stickney	950	
Allston.	Benjamin W. Roberts	2,000	571
	Mary I. Vinton	700	
	Susan M. Adams	520	
	Sara A. Bailey	620	
	Mary Blair	620	
	Mary M. Brigham	620	
	Hattie B. Johnson	570	
	Evelyn B. Kenney	620	
	Celia F. McFarland	620	
	Melissa M. McKinley	620	
	Emily R. Pitkin	620	
	Ida G. Smith	620	
	Carrie M. Williams	620	
Harvard.	James S. Barrell	2,000	798
	Frederick S. Cutter	1,000	
	Ada H. Wellington	700	
	Margaret B. Wellington	700	
	Theresa C. Bartlett	620	
	Susan F. Athearn	620	
	Emily F. Damon	620	
	Myra I. Ellis	620	
	Mary F. Emerson	620	
	Clara A. Emerton	620	
	Frances Fabyan	620	
	Estelle J. French	620	

Tabular View of the Public Schools—*Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Scholars Jan. 1, 1889.
Harvard.	Eliza S. Getchell	$ 620	
	Cora E. Hosmer	620	
	Etta M. Houghton	620	
	Harriet A. Townsend	620	
	Hortense O. Young	620	
Putnam.	Thomas W. Davis	2,000	552
	Frederick W. Eveleth	1,000	
	Eliza M. Hussey	700	
	Annetta Bruce	620	
	Lydia B. Collier	470	
	Anna M. Dormer	570	
	Sarah J. Fahy	400	
	Sarah M. Grieves	620	
	Annie B. Josselyn	620	
	Louise A. Keeler	570	
	Augusta G. Mirick	620	
	Eliza S. Paddack	620	
	Mary M. Sullivan	520	
	Alice L. Watts	620	
Shepard.	Edward O. Grover	2,000	586
	Nellie A. Hutchins	700	
	Mary A. Bosworth	620	
	Harriet V. Dever	470	
	Emma A. Falkner	570	
	Emily F. Fessenden	620	
	Harriet Foster	620	
	Ellen J. Hunt	620	
	A. Estelle Ingraham	620	
	Flora C. Ingraham	620	
	Evelyn J. Locke	620	
	Julia H. Osgood	620	
	Clara A. Peterson	620	
	Lizzie B. Shepherd	570	
Thorndike.	Ruel H. Fletcher	2,000	538
	Lelia A. Mirick	700	
	Emma F. Cogan	470	
	Grace W. Fletcher	620	
	Emma A. Hopkins	620	
	Abby A. K. Howard	620	
	Elizabeth G. Hutchinson	620	
	Martha A. Martin	620	
	Mary E. Nason	620	
	Elizabeth P. Regal	620	
	Abby S. Taylor	620	
	Laura S. Westcott	620	
	Lydia A. Whitcher	620	
Washington.	John W. Freese	2,000	654
	Annie E. Whittier	700	
	Eldora J. Clark	620	
	Lucy A. Downing	620	
	Mary L. Ells	620	
	Alice P. Fay	400	
	Adeline M. Ireson	620	
	Adelaide A. Keith	620	
	Winifred L. Kinsley	400	
	Margaret J. Penney	620	
	Hattie Shepherd	620	

Tabular View of the Public Schools.—*Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Scholars Jan. 1, 1889.
Washington.	Mary E. Stiles	$ 620	
	Abby M. Webb	620	
	Mary A. Wheeler	620	
Webster.	John D. Billings	2,000	830
	Charles H. Morse	1,000	
	Mary E. Towle	700	
	Esther F. Hannum	700	
	Marion H. Burnham	620	
	Ella E. Buttrick	620	
	Florence B. Chandler	620	
	Charlotte M. Chase	620	
	Annie Marion Dow	470	
	Susan I. Downs	520	
	Josie F. Lamprey	620	
	Anna S. Lamson	620	
	Georgia E. Lancaster	620	
	Gertrude A. Long	520	
	Clara E. Matchett	620	
	Alice C. Phinney	620	
	Minnie V. Reid	400	
	Mary A. Townsend	620	
Corlett.	Fannie P. Browning	630	80
	Sarah E. Clark	620	
Agassiz. Grammar. Primary.	Charlotte A. Ewell	700	131 166
	Maria L. Baldwin	620	
	Mary G. Carpenter	620	
	Emma A. Child	620	
	Frances W. Dawson	620	
	Dora B. Dean	620	
	Rosina C. Karcher	620	
Boardman.	Mary A. Lewis	655	317
	Christine R. Denyven	470	
	Mary Alice Gregg	470	
	Nellie E. Hastings	520	
	Elizabeth J. Karcher	620	
	C. Florence Smith	470	
	Sarah E. Stewart	620	
Bridge.	Elizabeth E. Dallinger	630	82
	Emily C. Dallinger	620	
Cushing.	Isadore I. Foster	630	77
	Eliza Dow Watson	520	
Dana.	Maria F. Williams	640	159
	Emily J. Allen	470	
	Cordelia J. French	620	
	Abby A. Lewis	620	
Dunster.	Susan E. Wyeth	635	111
	Nellie M. Colby	570	
Felton.	Sarah J. Gunnison	640	150
	Louise M. Britton	400	
	Fanny C. Hartwell	620	
	Minnie F. Munroe	620	
Gannett.	Sarah J. A. Davis	640	197
	Anna M. Jones	620	
	Mary A. Rady	620	
	Carrie H. Smith	620	
Gore.	Frances E. Pendexter	670	426
	Addie M. Bettinson	620	
	Anna E. Callahan	620	

Tabular View of the Public Schools—*Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Scholars Jan. 1, 1889.
Gore.	Elizabeth B. Gahm.....	$620	
	Katie L. McElroy......	400	
	Mary C. McNally.......	400	
	Mary E. Mulloney......	620	
	S. Louise Regal........	620	
	Emma J. Ross.........	520	
	Louise A. Stickney.....	620	
Holmes.	Marianne M. Webb....	640	181
	Mary L. Bullard.......	620	
	Ellen M. Cyr...........	620	
	Isabel Foster...........	620	
Lassell.	Nellie F. Ball...........	640	243
	Ella R. Avery..........	620	
	Rose V. Collier.........	400	
	Cora A. Reycroft.......	620	
	Frances E. Whoriskey.	620	
Lowell.	Winona Abercrombie..	640	90
	Lucy E. Cyr............	620	
	Nellie F. McCarthy....	620	
Mason.	M. Lizzie Evans........	630	99
	Lizzie J. Baldwin......	570	
Otis.	Luvia Goodnow........	660	390
	Fannie Allen...........	620	
	Martha H. Butler......	620	
	Josephine M. Doherty..	620	
	Ellen N. Leighton......	620	
	Luella M. Marsh.......	620	
	Ellen C. Walsh.........	620	
	Kate F. Wellington....	620	
Quincy.	Charlotte E. Jewel.....	630	83
	Lucy C. Wyeth.........	620	
Reed.	Margaret Kidd.........	640	209
	Margaret T. Burke.....	400	
	Harriet N. Keyes.......	620	
	Julia A. Robinson......	470	
Riverside.	Elizabeth A. Tower....	640	198
	Amanda M. Alger......	620	
	Mary A. Burke.........	570	
	Ella E. Coye............	620	
Sargent.	Mary A. Brown........	640	187
	Christina D. Barbey....	570	
	Thyra C. Kalberg......	400	
	Ella M. Leaver.........	470	
Stearns.	Helen M. Ward........	640	177
	Maria J. Bacon.........	620	
	Ellen A. Cheney........	620	
	Eva A. Taylor..........	520	
Tarbell.	Emma J. Young.......	640	206
	Mary A. Davis.........	520	
	Charlotte E. Hezlitt....	620	
	Annie L. Reilly........	400	
Willard. { Grammar. Primary.	Amelia Wright.........	680	{ 99 559
	S. N. Chamberlain.....	620	
	Belle F. Gulliver.......	520	
	Julia S. Gushee.........	620	
	Mary E. G. Harrington	620	
	Louise W. Harris......	620	

Tabular View of the Public Schools—*Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Scholars Jan. 1, 1889.
Willard.	Kate M. Lowell........	620	
	S. Agnes Mulloney.....	470	
	Emma C. Otis..........	620	
	Mary E. Sawyer........	620	
	Grace R. Woodward....	620	
	Laura Wright..........	620	
Wyman.	Fannie E. M. Dennis...	650	228
	M. Jennie Biddle.......	570	
	M. Carrie Dickman.....	620	
	Georgiana B. Dutcher..	620	
	Mary M. Gilman.......	620	
Wellington Grammar Primary.	Herbert H. Bates......	2,000	296 198
	Ella C. Whitney........	1,000	
	Training Class.........	3,000	

TEACHER OF SINGING—Nathan Lincoln	$1,700
SECRETARY AND LIBRARIAN OF THE HIGH SCHOOLS—Mattie L. Babbitt	500
SUPERINTENDENT—Francis Cogswell	3,000
AGENT—Sanford B. Hubbard	1,500

The Wellington School is a training school, composed of grammar and primary scholars, taught by young ladies, graduates of Normal Schools and candidates for the office of teacher, under the direction and with the assistance of the master of the school and his assistant.

Temporary assistants and members of the Training Class are counted as seven teachers, the sum of their salaries being about equal to the amount paid to that number of regular teachers.

The post-office addresses of the several schools are as follows :—

CAMBRIDGE—Washington*, Agassiz, Dunster, Holmes, Lowell, Quincy, Riverside.

CAMBRIDGEPORT—Latin, English High, Allston*, Harvard*, Webster*, Boardman, Bridge, Dana, Felton, Gannett, Mason, Sargent, Stearns, Tarbell, Wellington, Willard.

EAST CAMBRIDGE—Putnam*, Thorndike*, Gore, Lassell, Otis.

NORTH CAMBRIDGE—Shepard*, Reed, Wyman.

MOUNT AUBURN—Corlett*, Cushing.

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* Grammar Schools.

Summary.

Number of pupils in Latin School	231
Number of pupils in English High School	363
Number of pupils in Grammar Schools	5,135
Number of pupils in Primary Schools	4,733
	10,462
Number of pupils belonging to the Public Schools, Jan. 1, 1888	10,289
Increase	173

Average annual increase of pupils from 1860 to 1880 (inclusive)	219
Increase of pupils, 1881	403
Increase of pupils, 1882	448
Increase of pupils, 1883	280
Increase of pupils, 1884	165
Increase of pupils, 1885	589
Increase of pupils, 1886	267
Increase of pupils, 1887	371
Increase of pupils, 1888	173

Number of Schools	33
Number of School-rooms	232
Number of Teachers	240

COST OF INSTRUCTION.

Latin School	$12,211 00	For each pupil	$52 86
English High School	14,045 00	" " "	38 69
Grammar Schools	77,290 50	" " "	15 05
Primary Schools	63,141 30	" " "	13 34
Teacher of Singing	1,700 00		
Teacher of Drawing	510 00		
Superintendent	3,000 00		
Agent	1,500 00		
	$173,397 80	For each pupil	$16 57

Cost of instruction in Evening Schools	$1,058 00
Cost of instruction in Drawing Schools	1,350 00
Salaries of three Truant Officers	2,700 00

Remarks on the Statistics.

The increase over the last school year in the number of pupils registered is 339; in the average number belonging, 328; in the average daily attendance, 292. In the per cent of attendance there has been a decrease of one-tenth of one per cent. The number belonging to the schools in December, 1887, was 10,289; in December, 1888, 10,462; an increase of 173. The entire cost of the day schools, excluding the expenditure for new school-houses and new furniture, exceeds that of last year by $2,729.38, while the cost per pupil is less by 51 cents. In the entire cost of instruction the increase is $3,638.74, but in the cost per pupil it is less by 23 cents. While Cambridge expends a large amount for her schools, there are *two hundred and twenty-four* towns and cities in the State which make a larger expenditure in proportion to their wealth. In a list of the twenty-five cities, arranged numerically according to the percentage of their taxable property appropriated to the support of public schools for the year 1887–88, Cambridge is the *fifteenth*, and compared with the fifty-four towns and cities of our county, Cambridge is the *thirty-fourth.* In a list of the towns and cities of the State, arranged numerically according to the sum appropriated for each child between five and fifteen years of age, Cambridge is the *thirty-eighth.*

These statistics relating to the schools of the State are taken from the fifty-second annual report of the Secretary of the Board of Education.

School Accommodations.

It is unnecessary to refer to the needs of the High Schools, for already plans have been authorized for a new building for the English High School, and when this is completed the Latin School will find ample room for years to come in the building now occupied by the English High School.

The Peabody school-house on Linnæan Street will undoubtedly be completed in season for use at the opening of the schools in September. The Committee will then be able to give relief to the schools in Wards V. and I. As an experiment in this city, the Committee on Public Property has decided to adopt in heating and ventilating this building the system known as the Smead System.

In Ward IV. the school accommodations are insufficient. One class belonging to the Webster School occupies the ward-room; two classes are in the Willard school-house; and a hundred children living in the ward attend the Harvard School. The ward-room is not a suitable place for a school; and one of the two rooms at the Willard school-house occupied by pupils of the grammar grade is now needed for a primary class, and in April the other will be needed. The Harvard school-house contains sixteen class-rooms with a seating capacity for 760 pupils, two of the rooms seating only thirty-seven pupils each. There are at the present time 798 pupils belonging to the school, platform desks being used in most of the rooms. It is evident that the Harvard School has reached its limit as to numbers, and that provision should be made for the constant increase in its attendance. For the past four years the average increase has been thirty-two pupils a year.

In the opinion of the Committee, a new school-house in Ward IV. will best meet the requirements for school accommodations in both wards. By the withdrawal from the Harvard School of the children living in Ward IV., sufficient room will be made for the probable increase in the number of pupils attending that school for at least two or three years.

As the Mason school-house is one of the oldest in the city, and as the land on which it stands is valuable, it may be advisable, when the new school-house is completed, to discontinue that school and place the pupils attending it in the schools most accessible to them.

For many years the old Putnam school-house in Ward III. has been considered unsuitable for school purposes. The rooms are small and have no provision for ventilation of any practical value, and the plan of the building is such as to cause serious apprehension in case of fire. Two years ago the City Council gave the subject of school accommodations in this ward careful consideration, and the decision was that the Putnam school-house should be torn down and a new one of larger dimensions erected on the same site. That this might be done with the least interruption to the work of the school, the new house was so planned as to make it practicable to build a section of it before it was necessary to demolish the old one. This section has been built, but the old house stands; and its use is more objectionable than ever before, light and air being cut off by the new part.

In 1888 an act was passed by the legislature which was intended to secure proper sanitary provisions and ventilation in public buildings and school-houses. If this act is enforced, the city will be obliged either to abandon this house for school purposes or to expend a considerable sum of money to remedy the evils which exist. Is it not in the interest of economy, therefore, as well as for the health of the children, that the original plan be carried out without further delay?

Changes in the Corps of Teachers.

Resignations and appointments have been as follows:—

Latin School — 1 resignation, 2 appointments.
English High School — 2 resignations, 2 appointments.
Grammar Schools — 8 resignations, 9 appointments.
Primary Schools — 7 resignations, 9 appointments.

The number of changes during the year has been less than usual, but several of the teachers who have resigned had rendered faithful service to the city for many years. One vacancy was caused by death. Miss Mary H. Ross, the principal of the Tarbell School, was suddenly stricken down in the school-room while busy at her work. This occurred on a Friday afternoon, and on the following Sunday she died. Miss Ross was a graduate of our High School and of our former Training School, and was a teacher of rare excellence. She not only taught well but governed well, and the secret of her power was in the kindness of her heart.

Free Text-Books and Supplies.

At the meeting of the Board in October Mr. Barnes, for the Committee on Supplies, submitted a detailed report of the expenditures of that Committee for the year.

This report was accepted, and it was voted that it be incorporated in the annual report of the School Committee. The report, with the omission of the names of the firms and individuals among whom the expenditures were divided, is as follows: —

The Committee on Supplies begs leave to submit the following report of its doings for the school year ending July 3, 1888: —

Stock on hand July 1, 1887		$1,894 24
Purchases and expenditures to July 3, 1888		11,102 79
Total		$12,997 03
Cost of books and materials sold	$235 76	
Delivered to the Overseers of the Poor	15 04	
Delivered to Schools and Officers	11,014 40	
		11,265 20
Stock on hand July 3, 1888		$1,731 83

The purchases and expenditures have been: —

For text books	$4,465 13
Miscellaneous supplies [Stationery, Blank Books, Writing Books, Drawing Books, etc.]	4,968 12
Desk and reference books	449 88
Apparatus and furnishings	688 16
Expressage ($164.80); printing ($138.70)	303 50
Diplomas ($121.76); repairing books ($92.24)	214 00
Tuning pianos	14 00
	$11,102 79

Deducting the amount collected for damages ($88.39), the net cost of each grade of schools for text-books and supplies has been as follows: —

	Net Expense.	Average per pupil.	
		1887-88.	1886-87.
High Schools	$2,200 36	$3 94.4	$3 84.2
Grammar Schools	6,337 54	1 36.7	1 36.3
Mixed Schools	715 36	95.3	73.6
Primary Schools	1,045 87	24	19.7
Evening Schools	39 18		
Evening Drawing School	157 04		
Industrial School	54 62		
Officers of the Board	112 56		
Miscellaneous Expenses. [Expressage, Printing, etc.]	351 87		

The average expense per pupil for four years has been: for 1888, $1.068; for 1887, $1.051; for 1886, $1.17; for 1885, $1.88.

This shows an increase over last year of .017 per pupil, which is very small in view of the fact that many of the text-books were on their fourth year of service. In its report of 1884 the Committee estimated the average service of the text-books at four years; but thanks to the excellent care taken by the teachers and the children, and the thorough supervision of the Agent of the Committee, a large proportion of the books purchased in 1884 has been found in suitable condition for the fifth year's service. In this connection .the following data may be of interest:

During the four years the free text-book law has been in force, the Committee has supplied the High Schools with 7,600 text-books, and of these only 170, about 2.4 per cent, have been discarded as unfit for further service. The Grammar Schools have been supplied with 39,547 text-books, and of these 1,069 (about 2.7 per cent) have been discarded. The Primary Schools have had 13,273 text-books, and of these 1,284 (about 9.6 per cent) have been thrown out. Of the 1069 books discarded from the Grammar Schools 702 were Readers, and of the 1,284 books discarded from the Primary Schools 1,169 were also Readers, all of which have been used as exchanges, in part payment for the new Readers supplied in their stead. In the Primary Schools 45 books have been unaccountably lost; in the Grammar Schools 24; and in the High Schools none. The Committee cannot say how many of the discarded books have been taken from those purchased in 1884, but it is interesting to note that the whole number of books discarded (during the four years) is only 9.2 per cent of the number purchased at that time. In the light of these facts, too much praise can hardly be given the teachers for the unceasing efforts they have made, and the pains they have taken, to aid the Committee in protecting the property of the City, as well as for the cheerful and willing spirit they have manifested in performing the additional duties which have been thrust upon them by this free text-book law.

The Committee desires also to express its high appreciation of the faithful, painstaking, and conscientious manner in which the Agent has performed the laborious duties of his office.

One not familiar with the many details attending the business of this Committee can have little idea of the amount of work which devolves upon the Agent.

In closing this report, the Committee deems it proper to call the attention of the Board to the fact that since the passage of the free text-book law there has been a marked falling-off in the lasting qualities of some of the books now on our list. The Committee on Supplies must, of necessity, buy for the schools such text-books as have been, or may be, adopted by the Board; but it is certainly worth while for the Board to consider the serviceability of a book in connection with its desirability as a text-book. When it is found that copies of a book purchased in 1884 are in better condition in 1888 than copies of the same book purchased in 1887, it would seem advisable to take some steps to insure better workmanship in the make-up of the book.

Text-books and Course of Study.

Text-books adopted during the year: —

For the Latin School, — Avery's Elements of Physics; Gage's Introduction to Physical Science; Jungfrau von Orleans; Hill's Lessons in Geometry for Beginners; Die braune Erica; and Sheldon's Studies in Greek and Roman History.

For the English High School,— Avery's Elements of Physics; Gage's Introduction to Physical Science; Jungfrau von Orleans: Hill's Lessons in Geometry for Beginners; How we are Governed, by Miss Dawes; and Die braune Erica.

For the Grammar and Primary Schools, —

Little Daffydowndilly and other Stories; Stickney's Third Reader; Hyde's Practical Lessons in English; Sea-Side and Way-Side; Mason's New First Music Reader; and Mason's New National Music Charts.

Little Daffydowndilly and Other Stories, and the Third Reader were adopted for use in the Grammar Schools, the Third Reader being already authorized for use in the Primary Schools. The other books and the charts are to be used in either grade, as they may be found serviceable.

Changes in the course of study: —

German has been introduced into the Latin School as an optional study in place of French.

A three-years course has been arranged for the pupils attending the English High School who are connected with the Manual Training School.

The course for the Grammar Schools has been wholly revised, the changes being principally in the arrangement of the subjects in arithmetic and geography, and in the lessening of the number of subjects in arithmetic on which an examination is required for promotion. The course for the Primary Schools remains unchanged.

For a list of the text-books used in the schools, and for the courses of study, see the Appendix to this report.

Music.

The plan adopted in 1887, by which the singing-master gave instruction in the Grammar Schools during the morning sessions, and in the Primary Schools during the afternoon sessions, proved so satisfactory that it has been continued. During the year the New First Reader and the New Series of Charts of the National Music Course have been substituted for the old First Reader and Charts, and now the several classes of the Grammar and Primary Schools are supplied as follows: The Independent Music Reader is in the hands of the first, second, and third classes of the Grammar Schools, and the third class is also supplied with Carey's Graded Exercises. The fourth class retains the Intermediate Reader. The fifth and sixth classes use the New Second Reader and the New Second Series of Charts.

In the Primary Schools, the second class is supplied with the New First Series of Charts; and the first class, with the same charts, and also with the New First Reader.

The introduction of the new books and charts made it important that the teachers should receive instruction in the methods of using them. The Committee on Music, therefore, decided to have the teachers meet the singing-master at convenient times and places for this purpose.

Several meetings have been held for the teachers of the Primary Schools, but the books and charts were introduced so late in the year as to leave no time for the meetings of the Grammar School teachers.

As members of the Committee and other persons interested in the teaching of music may desire to be present when the singing-master gives his lessons, the "Time-Schedule" for the Grammar Schools for the six months beginning January 2, 1889, is here given: —

Time Schedule for Music Lessons.

	Allston	Harvard	Putnam	Shepard	Thorndike	Washington	Webster
January...........					2	3	4
	7	8	9	10	11	14	15
	16	17	18	21	22	23	24
	25	28	29	30	31		
February..........						1	4
	5	6	7	8	11	12	13
	14	15	18	19	20	21	25
	26	27	28				
March.............				1	4	5	6
	7	8	11	12	13	14	15
	18	19	20	21	22	25	26
	27	28	29				
April				1	2	3	15
	16	17	18	19	22	23	24
	25	26	29	30			
May					1	2	3
	6	7	8	9	10	13	14
	15	16	17	20	21	22	23
	24	27	28	29	31		
June						3	4
	5	6	7	10	11	12	13
	14	18	19	20	21	24	25
	26	27	28				

Drawing.

The work in this department was interrupted in the middle of the year in two ways: (1) by the resignation of Miss Balch, the special teacher of drawing, who received an appointment in the Oswego Normal School, New York, at an increase of salary ; (2) by a delay in procuring books, the question being whether Prang's Shorter Course should be substituted for his series known as the American Text-Books of Art Education. Under the supervision of Miss Balch, which extended over a period of three and a half years, the work in drawing was systematized and improved, and by her resignation the city loses the services of an efficient teacher. Her place has not yet been filled, as the question of appointing a Supervisor of Drawing, who should have charge of the work in the evening schools as well as in the day schools, has been under consideration.

The Wellington School.

[This is the Cambridge Training or Practice School.]

This school was opened in September, 1884, and differs from the other schools in this respect, — all the classes are taught by young teachers. Their work, however, is done under the immediate supervision of a master and a female assistant, who are held responsible for the instruction and management of the school.

The object in conducting a school on this plan is to give our Cambridge young women who desire to teach, and who have made special preparation for the work, an opportunity to gain experience under conditions favorable to their own success, and without prejudice to the interests of their pupils.

Graduates of the English High School or of the Latin School, who have also graduated from one of our State Normal Schools or from the Boston Normal School, will be preferred candidates for the position of teacher in this school. Other persons of equal attainments may be elected.

The required term of service is one year, and all teachers accepting positions do it with the understanding that they will remain for this length of time, unless excused by the Committee on the Training Class.

The money compensation for service is two hundred dollars per annum.

The school contains all the classes of the primary grade, with the third, fourth, fifth and sixth classes of the grammar grade, the number of pupils being about five hundred.

The Committee on the Training Class is authorized in the management of this school "to expend for salaries, in its discretion, an amount not exceeding the aggregate maximum salaries paid to female teachers for the instruction of the same number of pupils in the Primary and Grammar Schools."

It is now four full years since the establishment of this school and up to the present time (December 31) forty-five teachers have either completed the required term of service, or have been excused under the rules that they might accept permanent positions. Of this number there are only three residing in Cambridge who have not obtained schools, and two of these are recent graduates.

These statements in regard to the appointments of the graduates of the Training School are given, because it is sometimes said that our Cambridge girls do not have an opportunity to teach in our schools; while the fact is, that the number of Cambridge girls who have given themselves special preparation for the work of teaching, and have shown aptitude for it, is not equal to the demand.

Manual Training Class.

The Manual Training School, to which classes from the grammar schools have been sent for a portion of each year since 1884, has been discontinued in order that the experiment of instruction in manual training as a part of the public school system may be tried upon a broader basis, and under more favorable circumstances, in connection with the Manual Training School established and maintained by Mr. Rindge.

By the concurrent action of the Committee of this school and the School Committee, the following arrangements were made: Boys admitted to the English High School are permitted to elect the course of study which provides for instruction in the Manual Training School. This course is arranged for three years, and gives two hours a day to recitations in the High School, and three hours a day to work in the Manual Training

School, — one hour in drawing and two hours at the bench. No pupil is allowed to take that part of the course assigned to one school without taking the part assigned to the other; and to maintain his standing in either school, the pupil must conduct himself honorably and do satisfactory work in the other.

The number of pupils who have entered upon this combined course of study is sixty-two. They are divided into three sections, each section having its own company organization and its own times for duty in each school. So far there has been no serious difficulty in the management of the class, notwithstanding it is under the control of two distinct bodies. The reason is, the controlling powers are in perfect agreement.

For the course of study in this school see the Appendix to this report.

Evening High School.

Chapter 236 of the Acts of 1886 provides for the establishment and maintenance of evening high schools as follows:

> 1. Every city of fifty thousand or more inhabitants shall establish and thereafter annually maintain an evening high school in which shall be taught such branches of learning as the school committee thereof may deem expedient, whenever fifty or more residents, fourteen years of age or over, who desire and, in the opinion of the school committee, are competent to pursue high school studies, shall petition in writing for an evening high school and certify that they desire to attend such school.
>
> 2. The school committee shall have the same superintendence over such schools as they have over day schools; may determine the term or terms of time in each year and the hours of the evening during which such schools shall be kept, and may make such regulations as to attendance thereat as they may deem proper.

At the meeting of the School Committee in September, petitions were presented for the establishment of an evening high school. These petitions were referred to a joint committee consisting of the members of the High School Committee and the Committee on Text Books, with instruction that they fix a standard for admission to an evening high school, and that they ascertain the qualifications of the petitioners "to pursue high school studies."

This Committee reported at the meeting of the Board in October, that at least fifty of the signers were qualified to enter upon high school work. The report was accepted, and was ordered to be sent, with the petitions, to the City Council. In compliance with the statute, the City Council at once established a school, and made provision for its maintenance. As the arrangements for the school were not completed until nearly the middle of December, it was decided to postpone the time of opening it until after the Christmas holidays.

Evening Schools.

The provisions for these schools was the same as had been made for several years. The school in Ward III. occupied the ward-room, and that in Ward IV. the room in which the Evening Drawing School is held. The attendance was as follows: number belonging to the school in Ward III. and present more than two sessions, 213; in Ward IV., 143. Average attendance in Ward III., 83; in Ward IV., 66. Average number of pupils to a teacher in Ward III., 8.3; in Ward IV., 10.4. From year to year the Committee has referred to the unsuitable and insufficient accommodations for evening schools. In future reports no such reference can justly be made, for the City Council, through the Committee on Public Property, has made provision for the lighting of as many school rooms as shall be needed for evening use. No better accommodations can be desired than are now enjoyed by the pupils of the evening schools for 1888–89.

Evening Drawing Schools, 1887–88.

As was said last year, these schools are accomplishing all that can reasonably be expected while they are confined to their present accommodations. Additional rooms are needed in order to admit of proper classification. It is also desirable that a course of study be prepared, so that persons may know before joining the schools what subjects are taught, and the order in which they are taken up.

The average attendance for the fifty sessions was: free-hand class, 62, with three assistant teachers; mechanical class, 39, with two assistant teachers. Number between the ages of twenty and thirty, 62; between the ages of thirty and forty, 15; High School pupils, 30.

The Appendix to this Report.

From year to year there has been an increasing demand upon the time of the Superintendent for information relating to the schools. Much of this information is already in print, but not in convenient form for use, being scattered through various reports and among separate papers and cards. In the interest of economy, therefore, if time is money, the Superintendent has collected and classified the information most frequently sought, and recommends that it be printed as an appendix to this report.

In School Committee, February 21, 1889.

Voted, That the report prepared and read by the Superintendent be adopted as the annual report of the School Committee for 1888, and that the Secretary be authorized to append the names of the Board thereto.

SANFORD B. HUBBARD,
Secretary.

Members of the School Committee for 1888.

WILLIAM E. RUSSELL, *Chairman ex officio.*

JOHN L. HILDRETH,
EDWARD H. HALL,
ALICE M. LONGFELLOW,
PHEBE M. KENDALL,
JAMES L. PAINE,
ALPHONSO E. WHITE,
FELIX CONLAN,
PATRICK J. FINNIGAN,
RICHARD J. McKELLEGET,
WILLIAM H. ORCUTT,
ASA P. MORSE,
MOSES D. CHURCH,
WILLIAM A. START,
ALBERT M. BARNES,

GEORGE A. ALLISON.

VALEDICTORY ADDRESS.

VALEDICTORY ADDRESS.

OF

HON. WM. E. RUSSELL, MAYOR.

DELIVERED JAN. 2, 1889.

Gentlemen of the City Council: —

A pleasant custom permits and expects a mayor, as he retires from his office, to give a brief account of his stewardship. With a mingled feeling of pleasure and regret I find the time has come for me to follow this custom — pleasure to be relieved of official care and responsibility, sincere regret to sever ties that for seven years have made municipal work part of my daily life, and permitted me to have a share in directing the affairs of our dear old city. Official ties only are severed. The friendships made will last. The mutual respect and confidence that have lightened our labor as we have worked together in the same vineyard, I am sure will continue in the future. With deep interest I shall ever watch the progress and prosperity of this city, where my whole life has been spent. To me she has been a kind mother. Freely I have shared in her many blessings; most generously I have been honored by her citizens. In return I have endeavored to render to her and to them faithful, unselfish service. Mistakes no doubt have been made; I have never knowingly done aught to injure her. With this feeling I submit tonight the record of my term of service.

Four years ago, in entering upon the duties of this office, I stated the policy that I believed should be followed in our municipal administration. Briefly stated, that policy was: To pay the year's expenses from the year's income, and have no floating debt; in fixing the expenses, to practice the care, economy and honesty that are a public duty when using others' money as a public trust; to be prudent and farsighted in fixing the year's appropriations, which determine the year's income, and then to live within that income thus determined, and so avoid extravagance, unpaid bills or debt; to lighten, if possible, the burden of the city's taxes while providing properly and fully for her needs; and with a liberal, comprehensive spirit to plan and begin such public improvements as her future needs make of present planning and providing a present necessity; lastly, to use the power granted us for public purposes only — not for personal or selfish ends, not for partisan or political interests, nor as an instrument to reward or punish.

The policy thus declared was the pledge given. No other pledge or promise have I ever given or been asked to give, except faithfully to enforce all laws and preserve the peace. I believe the pledge has not been broken.

The first year of my administration (1885) began with a treasury almost empty, with unpaid bills of over $20,000, with a floating debt for current expenses of past years of $206,040, including a deficiency of $35,040 to the city sinking fund, and with the tax rate at $16,80. That year and every year since has ended with all bills paid, with no floating debt and with the departments well within their appropriations. Meanwhile the tax rate has been reduced to $15.50 in 1885, $15 in 1886, $16 in 1887 and $15 in 1888, the average rate being less than for many years. After payment of all bills and deducting unexpended balances for work begun and not completed, each year has ended with a surplus in the treasury varying from about $45,000 to $55,000. All current annual expenses have been met out of each year's income without debt, including such heavy expenses as the building of school-houses, an engine house, a city stable and the paving of Main Street. No debt has been created except by the undertaking of great public works long needed, whose benefits will be shared by many years to come. It is just and proper that those years should also share the burden. Only by so distributing it is it possible ever to undertake such work. Such a course was anticipated when in my first inaugural it was said: "Any unusual but necessary expense, such as the extension of the water works and cemetery, rebuilding the High School or building a new one,— which is incurred as much for the future as the present,—it is unjust should be wholly borne by the present. It properly is made a debt, to be distributed among the years that receive the benefit. Especially is this true where, as in the cemetery extension, the present expense will be repaid in future years by an annual income from the sale of new lots." The principle then declared applies with even greater force to the building of the new bridge and avenue to Boston, and to the purchase of a site for the new City Hall. Every dollar of new debt has been for some such great improvement. Notwithstanding the large amount so spent, the city debt proper, both gross and net, is less today than when my term of office began.

The following statement shows the city debt at the close of the financial year, November 30, 1884, with all additions and reductions that have since been made, and the balance as it stands today:—

1884.			
Nov. 30.	The funded city debt was		$1,762,000
	The floating debt was		206,040
	The total city debt was		$1,968,040
	The additions to Nov. 30, 1888 were as follows:		
	To pay the floating indebtedness of Nov. 30, 1884	$200,000	
	To pay for the extension of Cambridge Cemetery by the purchase of the Winchester estate in 1885	65,000	
	To pay for trunk sewers in the Belmont and North avenue districts in 1886 and 1887	55,000	
	To pay for building the Harvard bridge from Boston to Cambridge in 1887 and 1888	160,000	
	To pay for a lot of land for a new City Hall in 1888	83,000	
	To pay for the extension and widening of Front Street as an avenue to the Harvard bridge in 1888	50,000	
		$613,000	
	Amount carried forward		$1,968,040

Amount brought forward		$1,968,040
The reductions to Nov. 30. 1888, were as follows :		
Matured bonds paid in 1885	$189,000	
Matured bonds paid in 1886	167,000	
Matured bonds paid in 1887	120,000	
Floating debt paid in 1885	206,040	
	$682,040	
Deduct balance above	613,000	
Decrease		$69,040
City funded debt, Nov. 30, 1888		$1,899,000

In addition to the decrease of debt above stated.		$69,040 00
There should be added the unexpended balances now in the treasury, as follows :		
Received from sale of bonds for bridge and sewer loans and unexpended		61,876 97
The unexpended balance now in the treasury for other work begun, but not completed		22,319 66
Net balance now in the treasury over and above these balances		45,235 38
Amount paid or restored since 1885 of trust funds.		7,250 00
Total		$205,722 01
Deducting balance in the treasury at end of 1884	$158,50	
Decrease of city sinking fund since 1884.	90,228,26	
Total.		$90,386 76
Balance		$115,335 25

This balance of $115,335.25 represents the improved financial condition of the city since 1885, outside of its water debt, which is a distinct account and taken care of by the revenue of that department. During these years the city has paid for many school-houses, a city stable, engine house, largely extended its cemetery, commenced and nearly completed the new bridge and Front Street widening and extension, purchased a site for its new City Hall, introduced electric lighting and done much paving, in addition to the usual and increasing expenses of all its departments. The average tax rate has been lower than at any time since 1874. The city is now well within the limit of indebtedness fixed by law.

During this administration the extension of our water works to Stony Brook for an additional water supply has been begun and completed. Its cost, together with the cost of preparing Fresh

Pond as a proper receiving basin and of purchasing shore land has been very great, and increased the water debt.

A comparative statement of the water debt at the close of the financial year in 1884 and in 1888 is as follows:

Nov. 30, 1884, the funded water debt was		$1,459,500
The additions to Nov. 30, 1888, were as follows:		
To pay for general construction in 1886	$18,000	
To pay for the Stony Brook additional water supply and work upon Fresh Pond	581,000	
To pay for the land on the border of Fresh Pond	90,000	
Total	$689,000	
The reductions to Nov. 30, 1888, were as follows:		
Matured bonds paid in 1886	$100,000	
Matured bonds paid in 1887	150,000	
Matured bonds paid in 1888	175,000	
Total	$425,000	
Increase	$264,000	
Add increase as above to debt of 1884		$264,000
Total funded water debt, Nov. 30, 1888		$1,723,500

To the increase of funded water debt there should be added the decrease in its sinking fund	$264,000 00
from $787,161.56 in 1884 to $753,942 in 1888	33,219 56
Total	$297,219 56
Deduct the unexpended balance in the treasury from sale of water bonds	$16,672 01
Net increase of water debt	$280,547 55

The sum of $280,547.55 represents the total increase of its debt, after an extraordinary expense in the last four years of nearly $700,000. The sound financial condition of this department is very creditable to its management. The total cost of our water works to November 30, 1888, including the money paid for their original purchase ($291,480) in 1865, and all money spent for general construction, for the Stony Brook extension, for land purchased, and upon Fresh Pond, is $2,539,780. Its outstanding debt is $1,723,500, and its sinking fund is $753,942, making its net cost $969,558. This last sum represents the net cost of all its works, including its pumping station, engines and equipment, its land, reservoir and high service, and its hundred miles of pipe. Its own revenue has paid all its expenses, including maintenance, and has provided a sinking fund equal to nearly half its present debt. Its income last year was $218,808.89.

Outside of the water debt and the city debt proper there has been paid since 1884, in restoring trust funds as before stated $7,250, and to this amount the liabilities of the city have been further reduced. Every dollar since received in trust has been kept intact and properly invested. The city is now in a strong financial condition. Though she has had in the last few years extraordinary expenses, more in number and amount than ever before in the same period, she has borne them easily, maintained a splendid credit and a fair tax-rate.

Let us now briefly examine her material condition. Has Cambridge prospered in the past four years? It is little to her credit to be sound financially if she has been stagnant or has failed to undertake the great public improvements long needed. In answering these questions I will not detain you with a review of the ordinary routine work of the departments. With a constantly increasing population and valuation, a much larger attendance at our public schools, many more public streets to be repaired, paved, lighted and patrolled, nearly twelve miles of new sewers built, a very large increase in new buildings — the routine work of every department naturally has been greater. This additional strain the departments without exception have born creditably, not always doing all that was asked (that is never possible), but doing all that they could and doing it well.

In other and larger ways Cambridge has prospered. For many years great public needs had been knocking at her doors, whose demands could be no longer resisted. Nearly every department has had to meet and satisfy such demands. A failing water supply was seriously imperilling the safety and welfare of our city. A shorter, quicker way to Boston by the building of a new bridge and avenue was necessary for our city's continued growth and prosperity. Our High School building was wholly insufficient for its purposes. The Public Library had long needed and begged for better accomodations to make more useful its good work. Our City Hall, never thought to be a "thing of beauty or a joy forever," was totally inadequate for its departments. Even our "city of the dead" had become crowded to its utmost capacity. All these questions, involving a large expense, have now been settled. Our small and fast-failing water supply has been reënforced by an additional supply, and this question is settled, on a broad basis, for many years to come. Under legislative authority the water works were extended to Stony Brook; after three years of labor the work is finished. The expense has been great; the benefit is incalculable. Much credit is due to the water board and its officials, especially to its able, faithful president, for their ability, energy and industry in successfully accomplishing this task.

After years of fruitless negotiation with Boston to get her coöperation in building a new bridge and sharing the expense, a compulsory act for the purpose was asked and obtained of the legislature of 1887. The work was immediately begun, and is now well on to completion. The expense will be about $500,000, one-half of which falls upon this city. In addition there will be a large expense in making our avenue of approach, which work is now in progress.

Next to pure and abundant water and proper and complete drainage, there can be no greater public benefit, or one wider in its scope, than the building of this bridge. Cambridge and Boston have long since outgrown their present connecting thoroughfares. The convenience of 65,000 people on one side of the river, and of many thousands more on the other side, demands a quicker, shorter transit between them. With it also comes the filling and improvement of a large tract of flats now a nuisance, the gift of a beautiful park to Cambridge, and easy connection with the parks of Boston.

In 1885, to meet the pressing need of the High School for more room, a separation was made of its English and Classical departments, and the latter was moved to another building purchased for the purpose. It was hoped that in this way ample room had been furnished for some years. The growth of both schools, however, has compelled the City Council this year to take steps for the immediate erection of a new and large building. Plans have been prepared, and the work can soon be commenced. The estimated expense is about $100,000. A large, convenient and beautiful site for the building has been deeded to the city by her generous benefactor, Mr. Rindge.

By the same generous hand, and in the same broad public spirit, two other pressing needs of the city have been met. A beautiful building with ample grounds around it, is almost ready as the new and permanent home for our Public Library. A site has been purchased for the new City Hall which Mr. Rindge has most generously given to the city. Plans of the buliding have been made and approved, and the contracts signed for its construction. It will be commenced in the early spring, and finished, it is expected in about eighteen months. Nor has his generosity been confined to the actual needs of the city. Quite as timely and precious, and even more far-reaching in its usefulness, is his gift of a public Manual Training School, built, equipped and supported at his expense. The school is now open and more successful even than we had anticipated.

One other large and important want has been supplied during this administration. The Cambridge Cemetery, that long had needed more room, in 1885 was enlarged by the purchase, after much negotiation, of the adjoining Winchester estate. This has added to it 18 acres of available land, at an expense of about $65,000.

The statement of the progress Cambridge has made would certainly be very incomplete, if I neglected to mention two other great benefits her generous citizens have given her. The Cambridge Hospital built entirely by private effort and generosity, was finished in 1885, and soon commenced its noble work of charity. The Young Men's Christian Association, another private charity and public blessing, in 1885 commenced its active work. I know of no institutions that have a wider field of usefulness or more deserve public support.

Judged by her public improvements, greater in number and extent, I believe, than have ever before at one time been undertaken by any city in the State; by her growth in population, her wealth, her charities and useful works — the last few years in the history of our city have been a period of great activity, I trust also of useful activity. Truly she seems to be entering on a larger and grander life. In her gifts, her charities and her work, the blessing of God seems to rest upon her.

And now, gentlemen, as the time has come to say farewell, I wish we might be spared the pain of parting and remember only the ties of friendship, sympathy and a common interest that have bound us together so closely and pleasantly in the past. Between us there have always been hearty coöperation, mutual respect and a cordial, kindly feeling that have made work easy and friendships that can never be broken. Neither personal nor partisan discussions have ever entered into our deliberations. During my whole administration there has been in the City Council, I believe, no discussion of a party question nor a division upon party lines. The pledge given on assuming office has been kept — to conduct the administration upon business principles, to use the power granted us for public purposes only — not for personal or selfish ends, nor for partisan or political interests, nor as an instrument to reward or punish.

It is pleasant, as I leave this office, where for four years I have been brought into almost daily contact with the heads of the departments and their work, to record and commend the faithful, honest, earnest manner in which they, one and all, have labored for the interest of the city. It is a remarkable fact that during this whole period no change, with one exception, has been made in any salaried office of this city except by death or voluntary resignation. The one exception was for good cause after a public investigation and trial. This fact is creditable alike to our city and to her officials — to them as the best possible proof of their faithful service, to her as showing that she will and has sustained those who are loyal to her interest. No city is more fortunate in the faithful service of experienced officials. From them, from you, from her service, I part with a feeling only of sincere regret. The administration of her affairs passes now into other and most worthy hands. I know that my successor will have the same kind consideration and generous support from our citizens that have dealt gently with the errors I have made and made possible whatever good I may have accomplished.

In leaving now the service of this old historic city, may I lay at her feet the humble tribute that, uttered two years ago, comes back to me tonight with double force and feeling: "Grandly she has lived her life of more than two hundred and fifty years. Eight generations of her sons at her knee have received the blessings of religion and education. Tenderly she has ministered to the poor; proudly she has watched the success of all her children; faithfully she has administered her every trust. No heart beat more warmly in sympathy with the great heart of the nation in the hours of trial, suffering and struggle; no hand stretched out more promptly to uphold a nation's cause. Year by year her life has broadened out into a wider field of usefulness. The prayers and faith of the early founders have given to us a priceless heritage. Proudly we read her record of honorable distinction; loyally we cling to her as the blessed mother that watches over us."

APPENDIX.

APPENDIX.

ORDINANCES

PASSED IN 1888.

An Ordinance in Relation to the Salary of the City Messenger.

Be it ordained by the City Council of the City of Cambridge, as follows:—

From and after the first day of March, 1888, the salary of the City Messenger shall be at the rate of Eighteen Hundred Dollars per annum.

[*Adopted March* 13, 1888.]

An Ordinance in Amendment of an Ordinance in Relation to Fire Department.

Be it ordained by the City Council of the City of Cambridge as follows: —

Section 8 of Chapter 16 of the Revised Ordinances is hereby amended in the second line thereof by inserting after the word "Cambridge" the words "or whose daily occupation is carried on outside of the city limits." Also in the same line by inserting after the word "appointed," the words "or continue."

This Ordinance shall take effect on the first day of December, 1888.

As amended the section will stand as follows: —

SECTION 8. No person who is not a legal voter in the City of Cambridge, or whose daily occupation is carried on outside of the city limits, shall be appointed or continue an officer or member of the fire department.

This ordinance shall take effect on the first day of December, 1888.

[*Adopted May* 8, 1888.]

An Ordinance in Amendment of an Ordinance in Relation to Streets.

Be it ordained by the City Council of the City of Cambridge as follows: —

Chapter 36 of the Revised Ordinances is hereby amended by adding at the end of Section 16, as amended Dec. 30, 1885, the following paragraph: —

Whenever the Superintendent of Streets is about to construct a new street, or to break up the surface of any public way, he shall, at least two weeks before beginning work, notify the City Engineer, as head of the sewer department, the Superintendent of Lamps, and the Water Board. If either of these departments has any work to be done in the street or way so designated, it shall consult and arrange with the Superintendent of Streets in order that such work may be done before the surface of such street or way is again prepared for, and open to public travel. After such notice and opportunity have been given, neither of the three departments of sewers, lamps or water, shall, for the space of six months, break up such street or way within the area of such previous disturbance, except in case of obvious necessity to be certified to and approved by the Mayor. No street or public way shall be opened by drain layers or others, between the fifteenth day of November, and the first day of April, except in cases of necessity, certified to and approved by the Mayor, as hereinbefore provided.

[*Adopted May* 22, 1888.]

An Ordinance in Amendment of an Ordinance in Relation to Fire Department.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 23 of Chapter 16, of the Revised Ordinances, is hereby amended so as to read as follows: —

Section 23. No company shall be allowed to impose fines upon its members: but it shall be the duty of the Clerk of each company to enter in the roll-book provided by the city, all absences of each officer or member of said company from all fires and alarms of fire, and from the monthly and special meetings authorized by the Chief Engineer, and to make a monthly return of the same to the Board of Engineers. And for every such absence, except in case of sickness, there shall be deducted from the pay of such officer or member the sum of fifty cents, and the amount so deducted shall be paid at the end of each quarter to the Treasurer of the company to which the officer or member so fined shall belong, to meet the incidental expenses of the company. And if any officer or member shall have been absent from more than one third of the fires, or alarms of fire, occurring during the quarter, if the same are more than five in number, except in case of sickness, such absence shall be considered good cause for his discharge from the Department.

[*Adopted June* 26, 1888.]

An Ordinance in Relation to the Foreman of Hook and Ladder Company No. 2.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 1. The foreman of Hook and Ladder Company No. 2, shall be constantly employed, and at all times be in and about the hook and ladder house, except when unavoidably absent or excused from duty by the chief or an assistant engineer.

He shall, under the direction of the board of engineers, have the sole care of the hook and ladder house and all the property therein belonging to the city and shall be held personally responsible for the care and condition of the same. He shall be accountable for the proper performance of all duties required of the driver of the hook and ladder truck, and report to the chief engineer any neglect on his part.

His compensation shall be seventy-five dollars per month.

Section 2. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

[*Adopted June* 26, 1888.]

An Ordinance in Amendment of an Ordinance in Relation to Sinking Funds.

Be it ordained by the City Council of the City of Cambridge as follows:—

Section 3, of Chapter 34, of the Revised Ordinances, in relation to Sinking Funds, is hereby amended by inserting in the second line thereof after the word "bridges" the words, "except Harvard Bridge," and by adding at the end of the section the words, "The Harvard Bridge loan shall be negotiated for not exceeding thirty years."

[*Adopted September* 11, 1888.]

An Ordinance in Relation to the Erection and Maintenance of Telegraph Telephone and Electric Light Poles and Posts for the Support of Wires for the Transmission of Electricity.

Be it ordained by the City Council of the City of Cambridge, as follows: —

SECTION 1. No telegraph, telephone, electric light or railroad company, or other corporation or person, shall erect any post or pole to support wires for the transmission of electricity, in any public way or grounds, except by order of the Board of Aldermen previously obtained, in which the exact location of each post proposed to be erected shall be duly set forth; and no wire for the transmission of electricity for any purpose shall be attached to any tree, building, erection, or fixture of any kind, in any public way or grounds, by cross arms or other means, except by order of the Board of Aldermen, previously obtained, in which such tree, building, erection, or fixture shall be duly described.

SECT. 2. No corporation or person shall attach any wire for the transmission of electricity for any purpose, except the wires of the Fire Alarm Telegraph and Telephones for the use of the City of Cambridge, to any post already erected to support wires for the use of another corporation or person, except by order of the Board of Aldermen, previously obtained, in which such posts shall be duly described, and with the consent of the owners of such posts.

SECT. 3. All petitions presented to the Board of Aldermen for permission to erect posts to support wires, or to attach wires to trees or other fixtures for the transmission of electricity for any purpose, shall be accompanied with, or contain a statement of the exact location of each post proposed to be erected, and of each tree and fixture to which it is desired to attach such wires.

SECT. 4. None but sound, straight, well formed posts, smooth and free from decay, of quality satisfactory to the Committee on Roads and Bridges of the Board of Aldermen, and the Superintendent of Streets, shall be erected and maintained in any public way, bridge or grounds, under any permission to erect posts to support wires for transmission of electricity.

SECT. 5. All posts erected and maintained in the public ways for the support of wires for the transmission of electricity shall be set and maintained in a perpendicular position, as nearly as practicable of uniform height and in line with each other; and shall be kept properly painted by the owners thereof in such colors and manner as the Board of Aldermen may direct from time to time.

SECT. 6. Except by the permission of the Board of Aldermen, no wire for the transmission of electricity shall be attached to any post, tree, or other fixtures at a point less than twenty feet above the level of the street or ground, nor run along or across any public street or way, and no post more than forty feet high shall be erected for the support of such wires.

SECT. 7. The location of any post, pier, and abutment erected or used by permission of the Board of Aldermen to support wires for the transmission of electricity, shall be changed and altered whenever deemed necessary by said Board, and whenever said Board shall order such change of location it shall be done by the owners or constructors thereof or of the persons using the same, without unnecessary delay, and at their expense, or it may be done by the Superintendent of Streets under the order of the Board of Aldermen.

SECT. 8. Whenever any public way or bridge shall be torn up or disturbed by any corporation or person in the setting, altering, repair or removal of post or other fixtures used for the carrying of wires, such public way shall be promptly restored and put in proper condition, to the satisfaction of the Superintendent of Streets, by such corporation or person; and in case of neglect to repair properly and to restore and put in proper condition such public way by such corporation or person, the Superintendent of Streets shall forthwith put the same in good order at the expense of the corporation or person setting, altering, repairing or removing such posts and other fixtures.

Sect. 9. On all posts erected by permission of the Board of Aldermen to support wires for the transmission of electricity, space on the upper cross-arms shall be furnished if required for the use of the Fire Alarm Telegraph and Telephone for the use of the City of Cambridge.

Sect. 10. Whenever permission shall be granted by the Board of Aldermen to erect and maintain posts or other fixtures in the public way, bridges, or grounds, to support wires for the transmission of electricity, the party to whom such permission is granted, shall, within thirty days from the date of the order granting such permission, file in the office of the City Clerk a written acceptance of the location of such posts or other fixtures, and the conditions upon which the permission has been granted; and in default thereof such grant shall be null and void.

Sect. 11. Every corporation or person, maintaining or operating a telegraphic, telephonic, or other electrical line shall at all places where such line is affixed to any post, structure, or fixture, mark such post, structure or fixture in a clear, durable and legible manner, with the name of the corporation or person maintaining or operating such line, and when any wire shall be affixed to the post or fixture of another corporation or person it shall be attached to a suitable cross-arm which shall be marked in a clear, durable and legible manner with the name of the corporation or person maintaining or operating such line. No wire shall be attached to any pole or post by means of brackets or other side fixtures, nor the wires of more than one party be placed on the same cross-arm except by permission of the Board of Aldermen.

Sect. 12. Every corporation or person maintaining or operating a telegraphic, telephonic, or other electrical line, in the city of Cambridge, shall execute a bond, with satisfactory surety or sureties in a penal sum not less than ten thousand dollars conditioned to indemnify and save harmless the city against all damages, costs and expenses whatsoever to which the city may be subjected in consequence of the acts or neglect of such corporation or person, its or his agents or servants, or in any manner arising from the rights or privileges granted it or him by the city; and also to fulfil all its or his agreements with the city and its or his duties under this ordinance and ordinances in addition thereto and amendment thereof; and a new bond of like import may at any time be required of such corporation or person by the City Council. Such new bond shall be a strengthening bond, unless the sureties on former bonds are expressly released from further liability by vote of the City Council.

SECT. 13. For the violation or neglect of any provision of this ordinance, the owners or constructors, or the persons using the post, fixtures or wires so violating or neglecting, shall be subject to a penalty of twenty dollars for each and every offence.

[*Adopted November* 1, 1888.]

An Ordinance in Relation to the Salary of the Superintendent of Lamps.

Be it ordained by the City Council of the City of Cambridge, as follows: —

The salary of the Superintendent of Lamps shall be nine hundred dollars a year, to date from October 1, 1888.

[*Adopted December* 5, 1888.]

An Ordinance in Relation to the Compensation of the Sergeant of Police, detailed as Court Officer.

Be it ordained by the City Council of the City of Cambridge, as follows:—

From and after the first day of December, 1888, the compensation of the Sergeant of Police, detailed as Court Officer, shall be at the rate of three dollars and twenty-five cents per day while on Court duty.

[*Adopted December* 26, 1888.]

An Ordinance Concerning Gate-Boxes, Man-Holes, or other Permanent Openings in Streets.

Be it ordained by the City Council of the City of Cambridge, as follows:—

Whenever any gate-box, man-hole, or other permanent opening, or movable cover is put or maintained in any street or way outside of the line of the sidewalk, granite block paving shall be laid around the same to a distance of three feet, except when the sidewalk is nearer than that distance, in which case such paving shall be laid to the line of the sidewalk, and for a distance of three feet in every direction.

[*Adopted December* 26, 1888.]

An Ordinance in Relation to the Compensation of the Permanent Members of the Fire Department.

Be it ordained by the City Council of the City of Cambridge, as follows: —

From and after the first day of December, 1888, the compensation of the Permanent members of the Fire Department shall be as follows:—

Engineers of Steam Fire Engines (per month) . . .	$100 00
Drivers of Steam Fire Engines (per month) . . .	85 00
Drivers of Hook and Ladder Trucks and Hose Carriages (per month)	85 00
Fire Alarm Telegraph Operator (per month) . . .	100 00
Assistant Fire Alarm Telegraph Operator (per month)	85 00
Foreman of Hook and Ladder Company, No. 2 (per month)	85 00
Engineman and Driver of the Chemical Engine, each (per month)	85 00

[*Adopted December* 26, 1888.]

An Ordinance in Relation to the Salary of the City Solicitor.

Be it ordained by the City Council of the City of Cambridge, as follows:—

The salary of the City Solicitor shall be at the rate of twenty-five hundred dollars a year, to date from December 1, 1888.

[*Adopted December* 26, 1888.]

An Ordinance in Amendment of an Ordinance in Relation to the Cambridge Public Library.

Be it ordained by the City Council of the City of Cambridge, as follows:—

Chapter 7, of the Revised Ordinances, as amended, November 17, 1880, is hereby amended by striking out the second, third and fourth sections, and inserting in place thereof the following:

SECT. 2. The care, superintendence and management of said library shall be vested in a board of trustees, to consist of one member of the Board of Aldermen, one member of the Common Council, one member of the School Committee, and six citizens at large to be chosen as hereinafter provided.

SECT. 3. There shall be elected annually in the month of January or whenever a vacancy may occur, in convention of City Council, one member of the Board of Aldermen, one member of the Common Council, one member of the School Committee to serve for the current municipal year. The citizens at large composing said board of trustees shall be elected as follows: In January, 1889, and January, 1890, two trustees shall be chosen in each year by the City Council, in joint convention, to hold office, one for a term of three years, and one for a term of one year respectively from the third Monday in January in the year in which they are chosen. In January, 1891, and in the same month of each year thereafter, two trustees shall be elected annually by the City Council, as aforesaid, to hold office for the term of three years from the third Monday of the January of the year in which they are elected, and in case of a vacancy in any of the above cases for the unexpired portion of the term. But the above shall be in no manner so construed as to affect the outstanding term of any present member of said board.

SECT. 4. Said trustees may choose from their number a chairman and secretary, and five members of the board shall constitute a quorum for the transaction of business; they shall choose annually in the month of January, a suitable person to be librarian, who shall be removable at the pleasure of the board, and shall receive such compensation as the trustees may determine.

The foregoing amendments shall take effect on the first Monday in the month of January, 1889, and all ordinances and parts of ordinances inconsistent with the foregoing, are hereby repealed.

[*Adopted January* 2, 1889.]

An Ordinance in Amendment of an Ordinance in Relation to Water Works.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 20, of Chapter 39, of the Revised Ordinances, is hereby amended by striking out the second sentence of article 7, of said section, as follows: "If a building is occupied by several tenants, the owner of the property shall be liable for the water-rates"; and by inserting in place thereof the following: "The Registrar shall make all water-rates charges (with the exception of charges for metered water) to the owner of the property, and in every case the owner shall be liable for the water rates, except where the ownership is changed after water is shut off for non-payment, in which case the new owner shall be liable for the water-rates from the time when the water is again let on.

This ordinance shall take effect on the first day of May, 1889.

[*Adopted January* 2, 1889.]

An Ordinance in Relation to the Salary of the Clerk of Committees.

Be it ordained by the City Council of the City of Cambridge, as follows:

"On and after the first day of January, 1889, the salary of the Clerk of Committees shall be at the rate of twenty-four hundred dollars a year."

[*Adopted Jan.* 2, 1889.]

MAYORS

OF

THE CITY OF CAMBRIDGE.

FROM 1846 TO 1889.

James D. Green	from	May, 1846,	to April, 1848.
Sidney Willard	“	April, 1848,	to April, 1851.
George Stevens	“	April, 1851,	to April, 1853.
James D. Green	“	April, 1853,	to April, 1854.
[1]Abraham Edwards	“	April, 1854,	to January, 1855.
Zebina L. Raymond	“	January, 1855,	to January, 1856.
John Sargent	“	January, 1856,	to January, 1860.
[2]James D. Green	“	January, 1860,	to July 24, 1861.
[3]Charles Theo. Russell	“	July 31, 1861,	to January, 1863.
George C. Richardson	“	January, 1863,	to January, 1864.
Zebina L. Raymond	“	January, 1864,	to January, 1865.
J. Warren Merrill	“	January, 1865,	to January, 1867.
Ezra Parmenter	“	January, 1867,	to January, 1868.
Charles H. Saunders	“	January, 1868,	to January, 1870.
Hamlin R. Harding	“	January, 1870,	to January, 1872.
Henry O. Houghton	“	January, 1872,	to January, 1873.
Isaac Bradford	“	January, 1873,	to January, 1877.
Frank A. Allen	“	January, 1877,	to January, 1878.
Samuel L. Montague	“	January, 1878,	to January, 1880.
James M. W. Hall	“	January, 1880,	to January, 1881.
James A. Fox	“	January, 1881,	to January, 1885.
William E. Russell	“	January, 1885,	to January, 1889.
Henry H. Gilmore	“	January, 1889.	Now in office.

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[1] Municipal year changed.

[2] Resigned.

[3] First elected by the City Council.

GOVERNMENT

OF

THE CITY OF CAMBRIDGE.

1889.

MAYOR.

HON. HENRY H. GILMORE.

ALDERMEN.

JOHN H. CORCORAN, *President.*

JAMES F. AYLWARD,	ALEXANDER MILLAN,
JOHN H. CORCORAN,	WILLIAM T. NEILON,
CHARLES L. FULLER,	JOHN E. PARRY,
DANIEL E. FRASIER,	ALVIN F. SORTWELL,
GUSTAVUS GOEPPER,	FRANK H. TEELE.

Aldermen, by Wards.

Ward 1.	Alderman	MILLAN.
" 2.	Aldermen	TEELE and SORTWELL.
" 3.	"	NEILON, GOEPPER and AYLWARD.
" 4.	"	CORCORAN and FRASIER.
" 5.	"	FULLER and PARRY.

Clerk.

WALTER W. PIKE.

COMMON COUNCIL.

EDWARD A. BINGHAM, *President.*

EDWARD A. BINGHAM,	DANIEL F. KENNEDY,
ELMER H. BRIGHT,	PATRICK J. LAMBERT,
PATRICK J. CALLAHAN,	WALTER H. MURDOCK,
GEORGE E. CARTER,	JOHN M. PATRIQUIN,
JOHN S. CLARY,	JOHN T. PHELAN,
EDWARD A. COUNIHAN,	WILLIAM T. PIPER,
JOHN R. FAIRBAIRN,	ANDREW J. RADY,
J. FRANK FACEY,	CHARLES F. SANBORN,
JAMES GRANT,	CHARLES B. SEAGRAVE,
THOMAS HOULLAHAN,	EDWARD C. WHEELER.

Common Council, by Wards.

Ward 1. Messrs. CARTER, PIPER, GRANT and PHELAN.
" 2. Messrs. BRIGHT, HOULLAHAN, WHEELER, KENNEDY and RADY.
" 3. Messrs. CALLAHAN, CLARY, FAIRBAIRN and COUNIHAN.
" 4. Messrs. BINGHAM, MURDOCK, SANBORN, FACEY and PATRIQUIN.
" 5. Messrs. SEAGRAVE and LAMBERT.

Clerk.

EDWARD N. MANNING.

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WILLIAM LOCKLIN.

CITY CLERK.

WALTER W. PIKE.

ASSISTANT CITY CLERK.

EDWARD J. BRANDON.

CITY MESSENGER.

FRANCIS L. PRATT.

COMMITTEES OF THE CITY COUNCIL.

Joint Standing Committees.

Accounts.—*Aldermen* TEELE and FULLER; *Councilmen* PIPER, SANBORN and FAIRBAIRN.

Almshouse.—*Aldermen* NEILON and PARRY; *Councilmen* FACEY, KENNEDY and GRANT.

Assessors.—*Alderman* PARRY; *Councilmen* FAIRBAIRN and PATRIQUIN.

City Engineering.—*Aldermen* MILLAN and FRASIER; *Councilmen* RADY, COUNIHAN and FACEY.

Claims.—*Aldermen* MILLAN, CORCORAN and AYLWARD; the PRESIDENT and *Councilmen* HOULLAHAN, MURDOCK, PIPER, COUNIHAN and LAMBERT.

Finance.—The MAYOR and *Aldermen* CORCORAN, SORTWELL and GOEPPER; the PRESIDENT and *Councilmen* CARTER, WHEELER, CLARY, SANBORN and HOULLAHAN.

Fire Department.—*Aldermen* NEILON, and FRASIER; *Councilmen* FAIRBAIRN, PATRIQUIN and RADY.

Fuel.—*Aldermen* CORCORAN and SORTWELL; *Councilmen* CALLAHAN, WHEELER and GRANT.

Health.—*Aldermen* GOEPPER and FULLER; *Councilmen* PHELAN, FACEY and KENNEDY.

Lamps.—*Aldermen* FULLER and TEELE; *Councilmen* CALLAHAN, MURDOCK and PHELAN.

Ordinances.—*Aldermen* SORTWELL and AYLWARD; *Councilmen* HOULLAHAN, CARTER and WHEELER.

Printing.—*Aldermen* FRASIER and NEILON; *Councilmen* HOULLAHAN, FACEY and SEAGRAVE.

Public Instruction.—*Aldermen* AYLWARD and PARRY; the PRESIDENT and *Councilmen* PIPER, KENNEDY and MURDOCK.

Public Property.—*Aldermen* FRASIER and TEELE; *Councilmen* CARTER, CLARY and SEAGRAVE.

Roads and Bridges.—*Aldermen* MILLAN and GOEPPER; *Councilmen* PIPER, BRIGHT and LAMBERT.

Rules and Orders.—*Aldermen* CORCORAN and SORTWELL; *Councilmen* RADY, COUNIHAN and GRANT.

Water Supply.—*Aldermen* TEELE and FRASIER; *Councilmen* CARTER, SANBORN and FAIRBAIRN.

Special Committtees of the City Council.

Harvard Bridge.—The MAYOR, *Aldermen* SORTWELL, NEILON and FULLER; the PRESIDENT and *Councilmen* CALLAHAN, PIPER, SEAGRAVE, KENNEDY and MURDOCK; the CITY ENGINEER and CITY SOLICITOR.

Legislative Matters.—*Aldermen* TEELE and SORTWELL; *Councilmen* BRIGHT, COUNIHAN and RADY.

On Rindge Gifts.—The MAYOR, *Aldermen* FRASIER and GOEPPER: the PRESIDENT and *Councilmen* KENNEDY, LAMBERT and PHELAN.

Salable City Lands.—*Aldermen* FRASIER and TEELE; the PRESIDENT and *Councilmen* CARTER, CLARY and SEAGRAVE.

Standing Committees of the Mayor and Aldermen.

Bonds.—*Aldermen* SORTWELL, GOEPPER and PARRY.

Claims.—*Aldermen* MILLAN, CORCORAN and AYLWARD.

Fire Department.—*Aldermen* NEILON, FRASIER and TEELE.

Health.—*Aldermen* GOEPPER, FULLER and MILLAN.

Licenses.—*Aldermen* CORCORAN, MILLAN and PARRY.

Police.—The MAYOR and *Aldermen* TEELE, MILLAN and FRASIER.

Roads and Bridges.—*Aldermen* MILLAN, GOEPPER and SORTWELL.

Sewers.—*Aldermen* FRASIER, CORCORAN and GOEPPER.

Rules and Orders.—*Aldermen* SORTWELL, CORCORAN and NEILON.

Elections and Returns.—*Aldermen* NEILON, FULLER and AYLWARD.

Special Committee of the Board of Aldermen.

Soldiers' Aid.—*Aldermen* CORCORAN, NEILON, TEELE, MILLAN and PARRY.

Committees of the Common Council.

Bills in the Second Reading.—*Councilmen* CLARY, PATRIQUIN and GRANT.

Elections and Returns.—*Councilmen* CALLAHAN, WHEELER and LAMBERT.

Enrolled Ordinances.—*Councilmen* BRIGHT, PHELAN and SANBORN.

Members of the City Council.

With the Committees on which they have been appointed.

THE MAYOR.—Finance, Police, Harvard Bridge, Rindge Gifts.

ALDERMAN AYLWARD.—Claims, Ordinances, Public Instruction, Elections and Returns.

ALDERMAN CORCORAN.—Claims, Finance, Fuel, Rules and Orders, Licenses, Sewers, Soldiers' Aid.

ALDERMAN FULLER.—Accounts, Health, Lamps, Elections and Returns, Harvard Bridge.

ALDERMAN FRASIER.—Engineering, Fire Department, Printing, Public Property, Water Supply, Police, Sewers, Rindge Gifts, Salable City Lands.

ALDERMAN GOEPPER.—Finance, Health, Roads and Bridges, Bonds, Sewers, Rindge Gifts.

ALDERMAN MILLAN.—Engineering, Claims, Roads and Bridges, Health (Standing), Licenses, Police, Soldiers' Aid.

ALDERMAN NEILON.—Almshouse, Fire Department, Printing, Rules and Orders, Elections and Returns, Soldiers' Aid, Harvard Bridge.

ALDERMAN PARRY.—Almshouse, Assessors' Department, Public Instruction, Bonds, Soldiers' Aid, Licenses.

ALDERMAN SORTWELL.—Finance, Fuel, Ordinances, Rules and Orders, Bonds, Roads and Bridges (Standing), Harvard Bridge, Legislative Matters.

ALDERMAN TEELE.—Accounts, Lamps, Public Property, Water Supply, Fire Department (Standing), Police, Soldier's Aid, Legislative Matters, Salable City Lands.

THE PRESIDENT OF THE COMMON COUNCIL.—Claims, Finance, Public Instruction, Harvard Bridge, Rindge Gifts, Salable City Lands.

MR. BRIGHT.—Roads and Bridges, Legislative Matters, Enrolled Ordinances.

MR. CALLAHAN.—Fuel, Lamps, Harvard Bridge, Elections and Returns.

Mr. Carter.—Finance, Ordinances, Public Property, Water Supply, Salable City Lands.

Mr. Clary.—Finance, Public Property, Salable City Lands, Bills in the Second Reading.

Mr. Counihan.—Engineering, Claims, Rules and Orders, Legislative Matters.

Mr. Fairbairn.—Accounts, Assessors' Department, Fire Department, Water Supply.

Mr. Facey.—Almshouse, Engineering, Health, Printing.

Mr. Grant.—Almshouse, Fuel, Rules and Orders, Bills in the Second Reading.

Mr. Houllahan.—Finance, Claims, Ordinances, Printing.

Mr. Kennedy.—Almshouse, Health, Public Instruction, Harvard Bridge, Rindge Gifts.

Mr. Lambert.—Claims, Roads and Bridges, Rindge Gifts, Elections and Returns.

Mr. Murdock.—Claims, Lamps, Public Instruction, Harvard Bridge.

Mr. Patriquin.—Assessors' Department, Fire Department, Bills in the Second Reading.

Mr. Phelan.—Health, Lamps, Rindge Gifts, Enrolled Ordinances.

Mr. Piper.—Accounts, Claims, Public Instruction, Roads and Bridges, Harvard Bridge.

Mr. Rady.—Engineering, Fire Department, Rules and Orders, Legislative Matters.

Mr. Sanborn.—Accounts, Finance, Water Supply, Enrolled Ordinances.

Mr. Seagrave.—Printing, Public Property, Harvard Bridge, Salable City Lands.

Mr. Wheeler.—Finance, Fuel, Ordinances, Elections and Returns.

Clerk of Committees.

John McDuffie.

Board of Health.

Henry P. Walcott, M. D., *City Physician, ex officio.*

(Term, three years. Appointed 1889.)

(Term, two years.)

Daniel H. Thurston, (appointed 1888.)
William H. Whitney, (appointed 1889.)

Clerk.	*Health Officer.*
John McDuffie.	Alfred F. Holt, M. D.

Assistant City Physician.

(Elected in April by the Overseers of the Poor, subject to the approval of the Mayor and Aldermen.)

Lewis L. Bryant, M. D.

Health Officers.

Lothrop J. Cloyes.
Thomas H. Lucy.
Mark J. Folsom.
John F. Murray.

Surveyors of Highways.

The same persons who compose the Board of Mayor and Aldermen.

Auditor of Accounts.

Harry T. Upham.

Treasurer.

William W. Dallinger.

Assessors.

(Term, three years.)

Andrew J. Green (elected 1886).
Joshua G. Gooch (elected 1887).
Joseph Whittemore (elected 1888).

Assistant Assessors.

Charles H. Hunnewell.
George F. McKenzie.
Hamlin R. Harding.
John Lennon.
Thomas F. Cahir.

School Committee.

Henry H. Gilmore, Mayor, *ex officio*, *Chairman.*

(Term, three years.)

Ward I.

Alice M. Longfellow (term expires 1889).
John L. Hildreth (term expires 1890).
Edward H. Hall (term expires 1891).

Ward II.

James L. Paine (term expires 1889).
Alphonso E. White (term expires 1890).
Phebe M. Kendall (term expires 1891).

Ward III.

Felix Conlan (term expires 1889).
Richard J. McKelleget (term expires 1890).
Edmund Walsh (term expires 1891).

Ward IV.

Asa P. Morse (term expires 1889).
William H. Orcutt (term expires 1890).
Caroline L. Edgerly (term expires 1891).

Ward V.

William A. Start (term expires 1889).
George A. Allison (term expires 1890).
Albert M. Barnes (term expires 1891).

Secretary.

Sanford B. Hubbard.

Superintendent of Schools.

Francis Cogswell.

Overseers of the Poor.

The MAYOR, *ex officio*, *Chairman.*

(Term, five years.)

Sumner Albee (term expires 1889).
Michael Corcoran (term expires 1890).
Charles Walker (term expires 1891).
Stephen Anderson (term expires 1892).
Charles E. Vaughan (term expires 1893).

Secretary.

David P. Muzzey.

Visitor.

Vespasian Danforth.

Warden of the Almshouse.

Martin L. Eldridge.

Physician of the Almshouse.

Lewis L. Bryant, M. D.
(*Assistant City Physician.*)

Cambridge Cemetery.

Commissioners.

The MAYOR, *ex officio*, *Chairman.*

(Term, three years.)

George S. Saunders (term expires 1890).
John F. O'Brien (term expires 1890).
Leander Greely (term expires 1891).
Charles E. Raymond (term expires 1891).
Silas B. Buck (term expires 1892).
David Ellis (term expires 1892).

Superintendent.

Charles S. Childs.

Trustees of Cambridge Public Library.

Alderman.	*Common Council.*	*School Committee.*
Alvin F. Sortwell.	Edward A. Bingham.	Albert M. Barnes.

Citizens at Large.

John H. H. McNamee (term expires 1890).
Henry H. Gilmore (term expires 1890).
Charles Walker (term expires 1891).
Samuel L. Montague (term expires 1892).
Thomas W. Higginson (term expires 1892).
Oliver H. Durrell (term expires 1893).

Librarian.	*Secretary.*
Almira L. Hayward.	Charles Walker.

Cambridge Water Board.

The MAYOR and President of the Common Council, *ex officiis.*

(Term, five years.)

John F. O'Brien (term expires 1889).
George H. Howard (term expires 1890).
James M. W. Hall (term expires 1891).
Chester W. Kingsley, *President* (term expires 1892).
Leander M. Hannum (term expires 1893).

Clerk.

Walter H. Harding.

Superintendent of Water Works.

Hiram Nevons.

Pumping Engineer.

Edwin C. Brooks.

Water Registrar.

Walter H. Harding.

Trustees of Sinking Fund of Water Loan.

The Mayor, City Treasurer, and President of the Common Council, *ex officiis.*

Commissioners on Sinking Funds of the City.

(Term, three years.)

Charles H. Saunders (term expires 1889).
Frank A. Allen (term expires 1889).
John C. Bullard (term expires 1890).
George H. Howard (term expires 1890).
Joseph A. Holmes (term expires 1891).
Andrew J. Lovell (term expires 1891).

Trustees of the Sanders Temperance Fund.

The Mayor, and President of the Common Council *ex officiis.*

Alderman.	*Common Council.*
William T. Neilon	William T. Piper. Thomas Houllahan.

Trustees of the Bridge Charitable Fund.

The Mayor, and President of the Common Council, *ex officiis.*

Alderman.

Charles L. Fuller.

Trustees of the Dowse Institute.

The Mayor, and President of the Common Council, *ex officiis.*

William W. Wellington.
Willard A. Bullard.
Frank A. Allen.

Senators in General Court.

Third Middlesex District, Wards 1, 2, 4, 5.

Chester W. Kingsley.

Third Suffolk District, Ward 3.

Edward J. Donovan.

Representatives in General Court.

Chester F. Sanger.
George A. Perkins.
Horace G. Kemp.
John W. Coveney.
Moses D. Church.
Frank W. Dallinger.
Horace E. Clayton.

Registrars of Voters.

Horace K. Osborn, *Clerk* (term expires May 1, 1889).
Isaac Bradford, *Chairman* (term expires May 1, 1890).
James Cox (term expires May 1, 1891).
John W. Coveney (term expires May 1, 1892).

One appointed annually, in March or April, to hold office for four years.

Third District Court of Eastern Middlesex.

Standing Justice.

William H. Orcutt.

Special Justices.

Samuel W. McDaniel.
Jabez Fox.

Clerk.

Emerson W. Law.

City Solicitor.

Charles J. McIntire.

City Engineer.

Commissioner on West Boston, Craigie's and Prison Point Bridges.

William J. Marvin.

Harbor Master.

William J. Marvin.

Superintendent of Streets.

John McSorley.

Superintendent of Public Buildings.

Benjamin H. Steele.

Superintendent of Lamps.

B. Otis Danforth.

Board of Engineers.

Chief Engineer.

Thomas J. Casey.

Assistant Engineers.

First Assistant	Nathaniel W. Bunker.
Second Assistant	Charles W. Brackett.
Third Assistant	William B. Cade,

Secretary of the Board.

Nathaniel W. Bunker.

Police Department.

Chief of Police.

Lothrop J. Cloyes.

Captains of Police.

District I.	District II.	District III.
Thomas H. Lucy.	Mark J. Folsom.	John F. Murray.

Inspector.

Sergeant Lawrence J. Ducey.

Assistant Inspector.

Sergeant Alonzo S. Harriman.

Sergeants of Police.

James S. Alexander.
William F. Batchelder.
Charles L. Pike.
Daniel Callahan.
Denis Corcoran.
William Mullett.
Frederick B. Pullen.
Andrew Sproul.

Policemen.

(With the numbers of their badges.)

No.	
5	Frederick Apel.
7	George T. Barrington.
28	Edward F. Belcher.
53	Elbridge S. Blen.
69	Michael J. Brennan.
15	Michael Coffey.
29	Michael J. Conry.
66	Francis J. Coghlan.
20	Timothy Corcoran.
56	John Coulter.
34	Michael Culhane.
68	John W. Deehan.
39	Wm. H. Deehan.
40	Patrick Doyle.
50	Thomas F. Dynan.
8	Joseph H. Furbush.
38	Michael A. Ginty.
2	William H. Graves.
41	John J. Griffiths.
9	James P. Hall.
25	Thomas S. Hall.
12	Timothy J. Hartnett.
14	Benjamin F. Higgins.
49	Simon D. Hiscock.
47	Robert T. Hixon.
58	James H. H. Holt.
22	Moses W. Hooper.
37	Patrick F. Hurley.
33	Amos Jones.
11	Henry C. Jones.
19	Edward Joyce.
32	James M. Keaney.
35	Fred. L. Ladd.
44	Chas. C. Marston.
27	George A. Marston.
10	John J. McBride.
30	Jeremiah McCarthy.
1	John E. McCrehan.
26	James McElroy.
64	William H. McMenimen.
57	Hugh J. McNamee.
	James E. McNulty.
43	James E. Murray.
45	Patrick F. Murray.
4	Michael Neilan.
60	William Nickelson.
52	Charles W. Priest.
59	Thomas J. Real.
70	Frederick A. Robinson.
62	Bernard J. Roper.
46	Frank W. Scobey.
6	Leonard Shackford.
65	John E. Shaughnessy.
63	John W. Skelley.

No.	
21	George Smyth.
31	Charles H. Stetson.
24	David A. Stevens.
61	Cornelius Sullivan.
67	Thomas F. Sullivan.
13	William Twist.
42	John H. Wells.
3	Orrin B. White.
54	John Wiley.
48	John E. Winslow.

Policemen, without pay (within the Civil Service).

J. L. P. Ackers.
Horace A. Allyn.
Mark H. Appleby.
Richard Balmer.
John A. Bartlett.
William H. Bates.
Joseph Beaubo.
Charles F. Bowman.
Charles W. Brackett.
James T. Brassil.
Timothy J. Breen.
James K. Bresnan.
Daniel A. Buckley.
Ferdinand N. Buffum.
Nathaniel W. Bunker.
William Burgess.
James Burke.
Thomas J. Burns.
Samuel Busnach.
William B. Cade.
W. H. Carroll.
Thomas J. Casey.
Moses M. Child.
Charles S. Childs.
Ambrose H. Clark.
Noah M. Cofran.
John Collier.
William S. Collins.
James E. Corcoran.
Patrick Corcoran.
Carl A. Corlin.
Vespasian Danforth.
George C. Dilman.
James Doherty.
Patrick F. Dunlea.
George W. Durgin.
Frank A. Edson.
Martin L. Eldridge.
George H. Fairbairn.
Dennis J. Fielding.
John E. Fitzgerald.
Martin Flaherty.
Luther F. Flemming.
Thomas Flynn.
Oliver G. Fosdick.
William Foster.
James H. Furfey.
James J. Garvin.
Charles A. Gay.
William T. Gibson.
Eli L. Goodrow.
James Grant.
George W. Greenleaf.
Henry L. Hale.
Charles E. Hancock.
Luther Hapgood.
John L. Harrington.
George H. Hastings.
Thomas M. Howard.
J. Lewis Howe.
Plumer S. Howe.
William H. Howe.
William Hunnewell.
Samuel F. Hunt.

T. W. Jennings.
Thomas W. Jones.
A. B. Joy.
John A. Kelleher.
Conrad D. Kinnear.
Barney King.
Michael F. Lamb, Jr.
Martin V. Langley.
Charles S. Lincoln.
John Little.
Warren G. Livermore.
Abiel E. Long.
James W. Lovering.
Charles K. Luther.
John P. Maloy.
Francis M. Mason.
Bernard McCafferty.
Bernard McCaffrey.
Charles J. McCann.
John H. McCarty.
Joseph F. McCorry.
Bernard McElearney.
John B. McGovern.
James McNeill.
George W. Montgomery.
Thomas Montgomery.
Simon J. Mulvaney.
Dennis Murphy.
Michael Murphy.
Nathaniel M. Neale.
Augustus W. Nelson.
Hiram Nevons.
James H. Newman.
Thomas F. O'Brien.
Francis A. Osborn.
William F. Peck.
Edward Penney.
Joseph A. Pike.
Frederick E. Pond.
Linn B. Porter.
Francis L. Pratt.
P. H. Raymond.
S. C. Redding.
John Riley.
William H. Robertson.
Robert Rogers.
Charles L. Russell.
Joshua S. Sanborn.
John T. Shea.
Oscar W. Short.
Andrew G. Smith.
Gideon Smith.
Henry Smith.
James W. Thompson.
George W. White.
George Wood.

Policemen (without pay).

J. K. Abbott.
Samuel Carlton.
John Clark.
Albert D. Cleveland.
Joseph Conners.
Patrick Cronin.
Rufus S. Downe.
Harry Ellis.
Antonio Francis.
David Garvin.
Franklin C. Hatch.
J. A. Heslitt.
George P. Knowlton.
Adam G. Loner.
L. L. Lyon.
Manson Manchester.

James A. Mimnaugh.
R. H. Moltman.
Timothy D. Morse.
Patrick Murphy.
Patrick Nolan.
John A. O'Connor.
George A. Parmenter.
William E. Potter.
Charles M. Sanborn.
Peter Shea.
Alex F. Shepherd.
Joseph S. Skelton.
George L. Stevens.
Rolly Strovoll.
Denis P. Sullivan.
Anton J. Rice.
William P. Wallace.
A. Whiting Watriss.
Edgar L. Wentworth.

Keeper of Lock-ups.

Lothrop J. Cloyes.

Truant-Officers.

Moses M. Child.
John Collier.
Francis M. Mason.

Probation Officer.

Frederick W. Hagar.

Constables.

George T. Barrington.
William F. Batchelder.
Michael S. Busnach.
Lothrop J. Cloyes.
Josiah H. Cobb.
Vespasian Danforth.
Lawrence J. Ducey.
Benjamin W. Ellis.
John R. Fairbairn.
Thomas T. Ferguson.
Mark J. Folsom.
Joseph Fox.
Charles S. Gilbert.
Alonzo S. Harriman.
Alfred F. Holt.
Appleton Hubbard.
Warren Ivers.
Charles H. Hunnewell.
James M. Keaney.
John Lennon.
Charles S. Lincoln.
John Loughrey.
P. Allen Lindsey.
Thomas H. Lucy.
Frank H. Lull.
Frederic A. Lull.
James I. Murphy.
John F. Murray.
Daniel B. Nash.
James McD. Roy.
John W. Skelley.
Warren F. Spaulding.

Undertakers.

John W. Coveney.
Thomas Devens.
David Fudge.
Samuel F. Hunt.
Joseph J. Kelley.
Gustavus King.
Horace D. Litchfield.
Judson Litchfield.
C. Henry Lockhart.
Abiel E. Long.
James F. Mullen.
George F. Ricker.
John J. Ross.
William Ross.
James J. Shea.
William A. Taylor.
Benjamin F. Wyeth.

Auctioneers.

John K. Abbott.
Fred N. Brown.
Daniel A. Buckley.
Edward Burnham.
John W. Coveney.
Watson G. Cutter.
William R. Ellis.
John R. Fairbairn.
Max Frankenstein.
Leander M. Hannum.
Stephen H. Harrington.
Samuel W. Joel.
John Lennon.
P. Allen Lindsey.
Frederic A. Lull.
John Mahady.
James McD. Roy.
Edmund E. Sanborn.
Humphrey L. Snow.
Francis Traynor.
Herbert Walker.
Julius D. Whipple.

Fence-Viewers.

George B. Lothrop.
Abel Stevens.
Francis H. Stickney.

Field-Drivers.

James S. Alexander.
Frederick Apel.
William F. Batchelder.
Edward Brady.
George T. Barrington.
Edward F. Belcher.
Elbridge S. Blen.
Michael J. Brennan.
Daniel Callahan.
Dennis Corcoran.
Timothy Corcoran.
Michael J. Conry.
John Coulter.
Francis J. Coghlin.
Michael Coffey.
Michael Culhane.

John W. Deehan.
William H. Deehan.
Patrick Doyle.
Thomas F. Dynan.
Joseph H. Furbush.
Michael A. Ginty.
William H. Graves.
John J. Griffith.
Thomas S. Hall.
James P. Hall.
Timothy J. Hartnett.
Benjamin F. Higgins.
Simon D. Hiscock.
Robert T. Hixon.
Charles L. Pike.
James H. H. Holt.
Moses W. Hooper.
Patrick F. Hurley.
Amos Jones.
Henry C. Jones.
Edward Joyce.
James M. Keaney.
Charles C. Marston.
George A. Marston.
John J. McBride.
Jeremiah McCarthy.
John E. McCrehan.
James McElroy.
Hugh J. McNamee.
William H. McMenimen.
William Mullett.
James E. Murray.
Patrick F. Murray.
William Nickelson.
Michael Neilan.
Charles W. Priest.
Frederick B. Pullen.
Thomas J. Real.
Frederick W. Robinson.
Bernard J. Roper.
Frank W. Scobey.
Leonard Shackford.
John E. Shaughnessy.
George Smyth.
John W. Skelley.
Charles H. Stetson.
David A. Stevens.
Cornelius Sullivan.
Thomas F. Sullivan.
John H. Wells.
Orin B. White.
John Wiley.
James W. Wright.

Measurers of Wood and Bark.

Thomas F. Burbank.
William H. Hood.
Herbert T. Lawrence.
Albert G. Phelps.
Horace L. Porter.
Joshua S. Sanborn.

Pound-Keeper.

Thomas Burns.

Fish-Officers.

John S. Browning.
F. J. Caulkins.
H. A. French.

Hay-Weighers.

Thomas Gurnham.
Joshua S. Sanborn.
Timothy Sullivan.

Coal-Weighers.

Silas E. Buck.
Edward E. Coye.
David B. Clark.
Charles F. Carley.
Walter F. Grieves.
Fred A. Humiston.
Herbert T. Lawrence.
Marshall Lincoln.
Thomas H. Matthews.
George L. Mitchell.
John E. A. Mulliken.
Horace L. Porter.
Amos Pettingill.
Joshua S. Sanborn.
Alfred H. Wellington.
Ernest H. Wellington.

Weigher of Boilers and Heavy Machinery.

Joshua S. Sanborn.

Inspectors of Junk Shops.

Mark J. Folsom.
Thomas H. Lucy.
John F. Murray.

Sealer of Weights and Measures.

B. Otis Danforth.

Deputy Sealer.

Conrad D. Kinnear.

Weighers.

Leonard R. Bacon.
Thomas Burns.
Isaac A. Chandler.
James W. Coleman.
Ira Doughty.
John Guiney.
Alvin M. Haines.
Charles F. Hittinger.
Nathan H. Holbrook.
Henry Hooker.
Henry James.
Michael Leary.
William Maloney.
Alfred Morrill.
George L. Murdock.
Robert S. Paine.
John Reardon, Jr.
Joshua S. Sanborn.
Thomas H. Shea.

Inspector of Milk.

Frank A. Dunbar.

Inspector of Vinegar.

Frank A. Dunbar.

Surveyors of Mechanics' Work.

Charles A. Mason.
Arthur Hodges.
John S. Pollard.

Measurer and Surveyor.

Henry L. Hale.

Inspector of Charcoal Baskets.

B. Otis Danforth.

Measurer of Grain.

B. Otis Danforth.

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